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THE PSYCHOLOGY OF CONVICTION.
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FACT AND FABLE IN PSYCHOLOGY.

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THE PSYCHOLOGY OF CONVICTION

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THE PSYCHOLOGY OF CONVICTION

A STUDY OF BELIEFS AND ATTITUDES

BY

JOSEPH JASTROW
PROFESSOR OF PSYCHOLOGY IN THE
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DISCARD

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IN MEMORIAM

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PREFACE

THINKING is an art, the art of logic; and thinking is an expression of our total mental nature, which brings it under the domain of psychology. Psychology is concerned with explaining how we incline to think; logic undertakes to lay down the law of how we must think if we would think correctly. The actual thinking that we do, whether true or false, strong or weak, original or commonplace, consistent or capricious, direct or rambling, is none the less thinking. The results are psychological specimens, however well or ill they stand the test of logic; they are all plants, whether weeds or flowers. In the standard patterns of thought, the process begins with premises and ends with conclusions, and requires some sort of bond to hold the two together in an argument. Formally that is the whole procedure; actually it is little more than a bare skeleton, lacking all the features of the flesh-and-blood reality.

What makes it so is the distribution of our interests and the limitations of our mental nature. Primarily we are interested in conclusions; for they bear upon our conduct, our comfort, our emotional security. Thinking encounters — as it is stimulated by — the reality of facts and events, the complexity of experience. We live under a practical stress; thinking must satisfy needs. We are ever thrown back upon our composite psychology. The tangible outcome of our taking thought is the reservoir of our convictions, that supplies the stream of action. The relation between

thinking and doing is elastic as well as complex. Thinking may not decide, but merely incline; it gives rise to beliefs and attitudes, tendencies toward conclusions, more or less tempered, beset by reservations, qualifications, doubts, and counter-inclinations. Particularly are we moved by our emotions, our hopes and desires, more practically by our interests, always by our varied relations to the content of our thought.

As a consequence, though we share a common order of reasoning and a common human nature, we reach very different conclusions, approach the same problems in different attitudes, with different inclinations. Yet equally are we affected by the beliefs of others. Conviction is a social process, follows the herd instincts. Tradition and convention bear heavily upon us, and determine what we believe almost as rigidly as what we eat or what we wear. We are in the stream and are borne along by the general current, and caught in the eddies and tossed by the waves of our immediate surrounding. Still we must each sink or swim by our individual strokes of effort and give them the direction of our purpose. We cannot escape the obligation of setting a course, and in following it we show the impress of our psychology, the loyalty of our minds.

The subject of this volume is concerned with the interaction of our logical and our psychological nature. It attempts to deal with the psychology of our most complex logical products. It follows the "case" method as the only pragmatic procedure, the only one that does justice to the rich content of a concrete issue. In the course of the analysis principles emerge and are emphasized; as in a trial at court, the judge and jury,

though concerned with evidence and argument, are guided by principles. The sweep is a wide one and includes "cases" from the past, survivals into the present, of outgrown beliefs which still linger in strange persistence, popular beliefs in conflict with expert conclusion, and the varied range of controversy in which protagonists contend for opposite verdicts upon much the same though differently selected evidence. Since many of the beliefs thus creditably sponsored must in the nature of things be more wrong than right, the analysis has to consider closely the psychology of fallacy and prejudice, the tendencies to wrong belief that make a strong appeal to our nature.[1] For like reason a comparative survey of the several belief processes in terms of their logical structure, introduces the study of the series of "cases."

A supporting motive in the enterprise is to impress upon a generation over-impressed with the practical side of material achievement and the stern logic of events (so many of them plainly the complex issues of convictions that have become institutionally strong), the fundamental obligation of clear thinking, the moral obligation to be reasonable. Reasonableness is many-sided. It means a competent training in the process of evidence and argument; it implies a fair immunity from prepossession as well as from fallacy; it supposes a fair-mindedness, as much in the sporting

[1] In an earlier volume, *Fact and Fable in Psychology*, I have considered in more concrete manner a range of problems of more direct interest to psychology. Yet in some measure the present volume supplements the former one, and carries the same intention to distinguish between the fact and the fable that are so complexly interwoven in the fabric of our thought.

as in the judicial sense; and a tempered and well-poised sense of proportion, which is the essence of sanity. At no time are these qualities so supremely necessary as in the critical times through which the convictions as well as the emotions of men are now passing. The world war has shaken convictions and made necessary an examination of foundations, and a fundamental inquiry into the basis of those values that keep endeavor keen and civilization alive. In such times we learn to cherish with an increasing fervor the convictions that sustain our national and our individual being. The shock to men's minds has been as serious as to their senses. That German minds could think as they do seems even more amazing than that German hands should be so infamously polluted with crime. The assault upon reason has been as savage and as deadly as the violation of law, of morality, of decency, of honor, of humanity. The intellectual violation is the more responsible, since by its nature it emanates from the trained leaders, those by calling competent and vowed to the defense of the values of right thinking. The supreme importance of conviction is thus revealed in Macchiavellian motive and pan-Germanic perspective. But equally are the responsible nations of a moralized world determined to defend to the uttermost of their resources of mind and hand, of wealth and blood, the convictions that they are assured by all the evidence of time and faith, stand at the root of sane and humane living.

No phase of the quickening of convictions that comes in war time can compare in significance with this source of our determination. But it is chastening to consider

also the lesser menace and the slighter lessons, inherent in the altered psychological attitude that war brings. They may all be regarded as temptations toward intolerance under emotional stress; and they find their correction in the conviction that sanity and keeping one's head are indispensable supports of an enduring patriotism. As an instance of one type of unreason I have considered in the concluding chapter the widespread distortion of the position of pacifists, which has swept over the country in a wave of inconsistency, misunderstanding, and malice. That any word or deed, however slight or indirect, which in any measure interferes with the war efficiency of the nation, is to be unreservedly condemned; that those who persist in it must be restrained by force if need be, — all this and more is admitted by practical-minded, loyal citizens. But to direct this animus blindly against those who repudiate with vehemence and indignation the attitudes ascribed to them, is peculiarly intolerant in a democratic community. The most lenient explanation of the matter is that those guilty of the sin fail to distinguish between a principle and the mode of its application, and again that they fail to distinguish between patriotism and the approved manner of its expression. In a country that safeguards the right of opinion, men inevitably differ in their views of attitudes and policies that will best maintain the nation in its determination to win the war and win it rightly. When one body of loyal patriots attempts to impose its views upon another body of loyal patriots, the path of intolerance is approached. Fortunately the wise authorities of the central government are alert to the menace and are taking

steps to check its spread. Fortunately, also, the good sense of the American people may be trusted to aid the recovery from a temporary lapse, under an intelligible provocation.

War time demands that minor differences of opinion be set aside in favor of an indispensable unity of action; and by the same token it demands that no portion of the community be estranged from the common cause by a hostile attitude toward tenets and principles which in times of peace have contributed to the moral capitalization of the nation. Still more bindingly the same obligation rests upon advocates of views (in whatever field of opinion) which the majority regard as false and dangerous, but which under ordinary conditions are accorded a tolerant hearing, though equally a vigorous protest under approved principles of controversy. A flagrant violation of this tolerance appears in the suit instigated by the anti-vivisectionists against the Red Cross organization to prevent the use of funds in the interests of medical research; and that means, to mitigate the sufferings and save the lives of the victims of war. To push a private prejudice against a public interest at this time and in this manner is an ignorant, obstinate, and malicious attack, inhumane and unpatriotic even though sincere; it is a tragic demonstration of the menace that lies in unreason. Though exceptional, the instance should be used to strengthen the forces of reason and loyalty. Convictions have too momentous a part to play in the winning of the cause of the pledged allies to permit any encroachment upon their sacred principles. It is this conviction that gives pertinence to the general consideration of our logical

and psychological resources — the perfection of our intellectual munitions — at this critical period when right thinking must prove the powerful ally of right action.

Most of the chapters have appeared in periodical form; all have been thoroughly revised, and some rewritten in the interests of a more uniform presentation, and an adjustment to timely interests. Acknowledgments are made for permission to reprint as follows: To the *Popular Science Monthly* (now the *Scientific Monthly*) for the "Psychology of Conviction"; "The Antecedents of the Study of Character and Temperament"; "Fact and Fable in Animal Psychology"; to the *Educational Review* for "Belief and Credulity" and "The Democratic Suspicion of Education"; to the *Review of Reviews* for "The Case of Paladino"; to *Hampton's Magazine* for "Malicious Animal Magnetism"; to the *Nineteenth Century* for "The Will to Believe in the Supernatural." The remaining essays have not appeared before, the printing of one of them having been delayed by the exigencies of the war. The obligation which I owe in the election of the theme and in the continued pursuit of the central problem that gives unity to the volume, is acknowledged upon the dedicatory page. The preparation of the manuscript for the press has had the critical care of my wife.

JOSEPH JASTROW

MADISON, WISCONSIN
March 1918

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I

THE PSYCHOLOGY OF CONVICTION

I

A NOTABLE contribution of the world convulsion of 1914 and thereafter is to the psychology of conviction. It has been made plain as never before that the strength and directions of men's convictions — authoritatively formulated in loyalties — furnish the decisive motive power of the world's energies. Under this stimulus the need of inquiry into the mental processes that generate and direct convictions becomes increasingly imperative. There can be no question where beginnings lie. The original source of conviction is emotion. In terms of the world's crisis, the *modus vivendi* of nations is still expressible in Mr. Wells's phrase: a "convention between jealousies," and jealousy is an intense and disturbing emotion. The initial factor in the genesis of conviction is the rivalry between reason and emotion. Convictions are commonly and rightly considered as products of rational consideration; they testify to the distinctive quality of the human mind — conceived and glorified as the instrument of thought, the creator of civilization. In this view the progress of science unfolds as the triumph of reason. Fundamentally it is true that the pattern of conviction is designed and wrought of reason's thread, but not simply so. The design deviates, the workmanship is irregular, as thinking is emotionalized and favors the desired conclusion.

The psychology of conviction surveys the play of forces that shape the aims of men, however fine-spun or rough-hewn. The spirit of the survey is analytic; its method utilizes the historic retrospect, studying beliefs that once have lived and flourished, but interprets them by insight into the motives of convictions warmly vital, pragmatically alive, dispensing mingled profit and loss. Living beliefs, cherished and effective, alone supply adequate specimens for study. Their analysis is vivisectional, yet proceeds upon a competent control of established anatomical and physiological relations.

To reach convictions implies an impulse toward thinking; it implies the elementary data of experience, and the standard social environment in which beliefs operate and determine conduct. With these assumed, attention may be focused at once upon a constant, world-old and ever active factor, which may be called docility, contagion, complacency, imitation, convention — one and all of a nature compact. In this broader view, men's convictions, generation by generation, have been accepted traditionally, as they still are. In every direction of inquiry, beliefs have been embraced, and have kept thinking alive, that to later, more enlightened views appear strange, fanciful, and irrational. Most generally, people have believed and continue to believe what they are told and taught to believe. In terms of efficiency this factor in the psychology of conviction dwarfs all others, and may throw them out of perspective. Men of affairs as well as psychologists must continue to reckon with this comprehensive and insistent — whether wise or unwise — imitative-conservative tendency. Its field of operation is wide. In the inter-

pretation of nature and man's place in it; in the intimate contact with animals as quarry, as beasts of burden, and as companions; in the regulation of human intercourse — of family and tribe, of industry and conquest; in the formulation of myth and the constructions of religion; in the establishment of the social order, the dominant procedure by which uniformity is obtained is that of unquestioning acceptance; as in the practical domain of customs and morals, it is a like-minded tendency to conformity. In regard to these the ordinary man follows responsively, though with growing education more and more responsibly. Penalties are attached to violations, and the taboo rules with universal tyranny. Laws grow in strength and sanction with usage; no phase of thought or action, momentous or trivial, is exempt from the rigidity of the established. The dead hand of the past lays its heavy burden upon man's thinking, permeates the psychology of enlightened as of primitive belief. From a kindred source, in other temper, are derived the lessons of history, the continuity of science, the increasing purposes of men and nations.

By virtue of its comprehensive scope, the factor of conventional conformity may be assumed to be familiar. It occupies the background, constant in its presence, shifting in its setting, against which all other forces, jointly operative, are projected. Similarly important is the fact that in any liberal and modern environment, conformity escapes from a narrow and stereotyped prescription and proscription, and encounters the rivalry of conventions, the contests of opinions, the competitive selection among the loyalties. Congenial beliefs

are absorbed, uncongenial ones shunned, or, more truly, fail to enter the orbit of consideration. The conventional combines with and may prevail above the emotional factor in the issue. The gregarious, the social, the coöperative forces draw upon the supporting emotions, and merge the two. Convictions are formed and sustained that are emotionally acceptable and traditionally accepted by a considerable group of one's tribes-folk, neighbors, fellow-citizens; these are institutionally reinforced by the sanction of tradition and authority. But with the systematization of knowledge and the expanding tutelage of science, the play of logical thinking increases notably. In any modern approach the psychology of conviction presents its problems as those of rival reasoning and logical selection; it requires the investigation of the complex processes of inclination (or plausibility), by which the few are chosen among the many called or calling. It asks why the corner-stone of one man's mental edifice is rejected by the builders of others.

To consider the processes of conviction in any measure of detachment from its content is a sterile procedure. The life that is in them, however spiritually or formally sustained, flows in a definitely conditioned body. Lip-service in belief and hollow observance of custom are common incidents. The recital of creeds and rituals with a feeble sense of meaning finds its parallel in the allegiance to institutions, cults, laws, systems, parties, tenets, and practical attitudes with slight and vague appreciation of their basis, either by way of import or justification; for convention and the congeniality of adjustment rule. The part of reason, as likewise of a

less explicit intelligence, in the maintenance of convictions that are none the less warmly cherished and embraced, is limited; these limitations form the clues to the understanding of the forces by which beliefs live and move and have their being. The recognizable features through which that being is made manifest appear as the points of attachment of belief; they determine *what* men believe as well as in another phase of their complex psychology they determine *why* men believe.

II

If this approach is rightly set, the chief determinants of the psychology of conviction, with bearing alike upon process and content, are emotion and convention. Fundamentally beliefs are formed and held because they satisfy, because they minister to some deep psychological craving, or some simpler need or indulgence; equally significant is the sharing of such beliefs with others, which is their indispensable social reinforcement and gives the added value of a conscious adjustment and an acknowledged approval.

Before considering at closer range the nature of the satisfactions that sustain convictions, their psychology should be brought into relation with yet more comprehensive, allied processes. The general formula is supplied by sensibility, which stands as the parent type of the instrument of distinction. As ever, the feeling factor is basic; the elemental distinction is that between pleasure and pain. Recognition promptly enters, and fuses as it extends the lessons of comfort and discomfort, of profit and loss. It widens rapidly to increasing circles of distinctive mental situations, inherent in the

indirect responses required of complexly intelligent agents. Eventually distinction becomes an explicit and a logical process — a delineation between truth and error. In simpler situations men feel their way by support of sensibilities; gradually they come to reason their way through the problems that confront them. In any practical modern situation the rational factor is so pervasive, so intricate, alike by nature and tradition, that a prolonged and complex process of education is necessary to fit the individual to cope with it. The place of the keystone in the educative process is held by the structure of science, composed of highly specialized systems of relations, orderly analyses of causes and effects, rigid establishment of principles. These guide and support the most directive convictions of the human mind. In them appear the most adequate products of the logical mind, not detached from psychology, but surmounting it. Yet the earlier modes of reaching convictions, and the satisfactions attending them, persist; they yield, but never with complete surrender, to the later discipline.

The varieties of distinctions in the higher reaches of the mind, where lies the psychology of mature and complex convictions, comprise more than the logical ones. The regulations of attitude and action which they serve are commonly distinguished as of three orders: the logical, the moral, the æsthetic. In all there is a rightness and a wrongness, a principle of selection which distinguishes alike the decisions and the natures of men. The logically right, the morally right, the æsthetically right is set apart — sharply it may be, with delicacy and uncertainty of distinction more com-

monly — from the wrong. More specific terms are available. Logically there is the correct and the false, truth and error; morally there is good and bad in conduct and intention; æsthetically the standards are more variable, more responsive to condition, but the distinction between good taste and bad taste and their products is no less real. Convictions reflect these several phases of a common human nature. Conduct is determined by logical, moral, and æsthetic convictions. The factors cumulate and interact. The conviction is formulated as one, but embodies logical, moral, and æsthetic considerations. Now one and now another phase dominates; but the selecting mind is at once and compositely logical, moral, and æsthetic in its temper, expresses loyalty to each and all. Hence the complexity of the psychology of conviction. The same conclusion — which practically is a regulation of conduct through attitude and belief — is reinforced by logical, moral, and æsthetic supports. Men share a common allegiance in belief or action upon a somewhat different grouping of motives and reasons.

The practical criterion throughout is conduct. What men do depends upon what they believe, and how they feel; their thoughts and feelings are important because these affect their actions. The common utility is in the regulation of behavior. We thus return to the rôle of conviction as a determiner of conduct. Schooling and experience, book-learning and practical occupations, dealings with men and all manners of social observances and institutions — all of which are regulated by beliefs in the form of traditional explanations — leave as their deposit a logical sense, which acts

after the manner of sensibility of the sensory type but with a more complex psychology. The logical sense also follows its type, reflects the stage of culture of the times, the social station, the mental development. It functions by accepting congenial orders of belief and rejecting others, while the very conditions of its acceptances preclude from its horizon orders of conviction beyond its ken. All this is familiar because the like holds of every evolutionary product. The logical sense is the slowest, most laborious, as well as the most precious of psychological growths. As commonly exercised by the average man, it keeps him fairly safe from crude error so long as he remains on familiar ground. Within these limitations it distinguishes between the true and the false, much as his senses — in turn not so well protected as those of animals — distinguish (though not infallibly) between wholesome and unwholesome food. But to follow the lead of one's mind is a far more intricate matter than to follow one's eyes or one's nose. And similarly of one's moral sense and one's æsthetic sense: these select among the alternatives of conduct and preferences of attitude, make their way through situations, and in their exercise according to one's schooling and tradition confer alike logical, moral, and æsthetic sensibilities and their satisfactions — all of them capable of indefinite expansion. The record of that expansion is in a profound sense the story of civilization.

The moral sense and the æsthetic sense are truer to the parent type in that their affective ingredient is strong, and their social dependence marked. Moral convictions and the satisfactions which they bring —

and with a different bearing the same is true of æsthetic ones — affect the entire psychology of conviction. To neglect in any measure the moral and æsthetic moments in the genesis and operation of convictions is to miss the genius of their nature, the source of their strength. Logical convictions and the satisfactions attaching to them are in all respects more derivative and more artificial, belong characteristically to later educational stages. Yet our chief concern is with them, because the latter-day issues, which alone adequately illustrate the psychology of conviction as it affects our beliefs and attitudes, are so largely intellectual matters. Our approach to them and our faith in them is in the main a logical one. The disturbances of the even tenor of our logical ways by the strong currents of moral and æsthetic emotions and sentiments form a vital part of our problems. They shape daily prejudices no less than the jealousies and unreasoning loyalties that precipitate world's crises.

III

The profitable pursuit of the psychology of conviction proceeds by the "case" method. Outgrown and discarded beliefs and attitudes, no less than those within our living experience, furnish the data for instructive analysis and suggestive diagnosis. Types of belief demonstrably false, yet once prevalent and commanding the allegiance of a considerable portion of men of fair or superior intelligence, still bring a valuable lesson in the analysis of the appeal which they once made, in the dissection of the motives and arguments which led to their acceptance. As such types of belief

are selected from among modern, even contemporary movements, the use of latter-day enlightened criteria is the more justifiable; less allowance need be made for an imperfect logic and for the as yet unexplored regions of the continent of science. In point of fact the illustrations are continuous, with no breach of analogy between ancient credulity and its modern representatives, no abrupt change in the motives or the mechanisms of appeal. With due allowance for the change of outlook and attitude of other days and other ways, there must be considered the parallel changes in the grouping of forces at the focus of each problem considered. This gives the set to the psychology of the several "cases" of conviction; the cases fall into types, and the differentiation of types becomes the psychologist's task.

In clinical metaphor, each "case" requires the study of its antecedents, of the mode of life, and the individuality of the patient and of the nature of the disease from which he suffers. Patient and disease are at once one and distinct. The study of a "case" of conviction requires knowledge of the antecedents of the problems and its bearings upon human interests, along with a study of the appeal which it makes and the psychology of its adherents. There is the psychology of the conviction as an objective belief, and the psychology of the convinced as a subjective issue. If one assumed a detached point of view, one might separate the strictly logical cases and recognize beliefs accepted upon evidence and applied coldly and consistently. In this view the logical plant — which is the human mind — would accept the crude material in the form

of data and turn out the finished product as conclusions. If the result proves to be false, the fault lies in a too ready acceptance of premises or their imperfect manipulation. Such an analysis is bare and formal, literally true but psychologically barren. Yet, as will presently appear, a fair approximation to the type may be selected. The inclination to accept the premises upon the (inadequate) evidence, and the tendency to point the data to the ends reached (prepossession) are as real as the formal logical processes. These tendencies make the psychology of the problem, constitute its character.

"Cases" of this order may readily be summoned from the annals of science. Consider the explanation of fossils. Under a scholastic type of word-learning they were ascribed to a "stone-making force," a "lapidific juice," "seminal air," "tumultuous movement of terrestrial exhalations." To our type of science-drilled mind, all this is the mere husk and shell of explanation, empty verbiage, stale and unprofitable. Yet it is a factor in the psychology of conviction. Dogma and formulæ, formidable words, like popular slogans, help to carry conviction. They are more apt to contribute to obvious fallacy and pretense than to subtle error; but they play their part variably. On the other hand, when the upholders of scriptural literalism accounted for fossils as "sports of nature," as models made by the Creator before he had decided upon the most suitable forms for animals, or as snares hidden by the Almighty to tempt the unorthodox, we are plunged at once into definite prepossessions and allegiances to accepted doctrines which have powerfully

affected not only the beliefs but the actions of men. Charges of heresy lurk in the background, and we enter upon the warfare of science [1] with dogmatically established conviction, however fortified. When Voltaire argued (one does know how seriously) that "fossil fishes were the remains of fishes intended for food, but spoiled and thrown away by travelers; that the fossil shells were accidently dropped by Crusaders and pilgrims returning from the Holy Land," we read the explanation with a strange sense of incongruity between data and conclusion. The true explanation might have appeared strained to Voltaire, because the facts underlying it were so completely out of his ken. Everywhere facts and theories coöperate and determine plausibility. We reach an undisputed "case" of credulity, not merely of weak hypothesis, when we learn of one Beringer who presented long arguments to prove that fossils were "stones of a peculiar sort, hidden by the Author of nature for his own pleasure." It is related that Beringer's students prepared baked-clay fossils of fish, flesh, and fowl — and even specimens with Hebrew and Syriac inscriptions upon them — and buried them in the Herr Professor's favorite digging places. Illustrations of these miraculous fossils were published, with the subsequent attempt of the author to suppress the work when the deception be-

[1] It is in such service that Andrew D. White's *A History of the Warfare of Science with Theology* (1896), has become a classic. Science is neutral in its campaign. It necessarily regards dogma as its enemy; it respects the province of religion when the latter refrains from an invasion of occupied territory. The tremendous struggle of the evolutionary position to gain a foothold in the nineteenth century is an adequate example of the varied prejudices which scientific argument may encounter, in enlightened times.

came known. As an individual "case" of credulity the incident would be amusing only; its significance lies in this: that not the inherent improbability of the conclusion by our standards, but the standard of judgment of the convinced scholar is the essential consideration. The tendency to accept the explanation of the origin of fossils (the theory) is congenial to the acceptance of the "finds" as corroborative (the facts). But in the "case" of fossils, however explained, an objective attitude is readily taken. The conviction carries no social or emotional consequences; one's views of fossils have no bearing upon conduct, or at best a most remote one. It sets up no allegiances of a practical order, creates no causes or loyalties, except as the convictions one espouses become extensions of one's personality, defended with the warmth of a cause embraced.

IV

It is the peculiar merit of beliefs concerning our psychological nature in contrast to the constitution of natural objects like fossils, that they carry such a wide appeal, play so largely among the motives that support vital convictions, while yet patterned after the manner of scientific conclusions. An interesting group of beliefs relates to the interpretation of human types and differences. The ancient doctrine of temperaments, explaining the psychological types of men by the dominance of blood (sanguine), black bile (melancholic), yellow bile (choleric), and phlegm (phlegmatic), is as purely fictitious and as baseless as the cited views of the origin of fossils; but it persisted with remarkable tenacity and

gave rise to a varied progeny of speculations that in turn dominated the convictions and the practices of men. The doctrine of the four temperaments was incorporated in the "humoral" system of medicine. From Hippocrates to Harvey, diseases were diagnosed and patients treated in terms of the "hot" and the "dry," the "cold" and the "moist," with most fantastic elaborations. Chills and fevers, parchings and perspirations, flushing and pallor, confirmed the findings; and the recovery of the patient — by the assistance of nature or in spite of the resistance to nature — proved the value of the system and established the prestige of the practitioner. The explanation of disease (theory) and the cure of ills (practice) form such a powerful motive to thought and action that the entire armament of the mind's powers — scientific and imaginative — was brought to bear upon the problem. The most ambitious of such constructions was the medical application of astrology, seeking the fate of men in the positions of the heavenly bodies. Medicines were concocted and administered with reference to the position of sun, moon, and stars; elaborate correspondences were set up connecting the mineral, the vegetable, the animal kingdoms and the cosmic systems with the fates of men and the cure of ills that flesh is heir to. Disease is but part of man's fate. The prediction of the future, the control of fortune, the detection of talents — all combine and proceed upon the same flimsy logic and consoling psychology. The horoscope summarizes the issue astrologically as alchemy, physiognomy, palmistry, phrenology, and their like illustrate the persistence of the notions and the im-

aginative constructions by which they were satisfied.

These vagaries of the human mind in the realm of conviction — vagaries to us, but serious beliefs to former generations — embody a common psychological factor, that of finding what one seeks, which is vital to the understanding of each and all. Also central to their psychology is the tendency of the thought to shape the issue — the peculiar and elusive sense in which thinking aids and induces the result. In the treatment of disease this becomes "mind-cure" — the faith that facilitates as well as the prejudice that blinds. The possession of this key to the situation — like the knowledge of the true nature of fossils — exposes the irrelevance and falsity of the several wild if shrewd guesses and proofs; but unlike the "case" of fossils, the motives contributory to convictions in regard to human nature and the control of human fate continue in subtle and complex form to shape current views, orthodox and unorthodox alike. We are still subject to disturbing influences in the psychology of our convictions, in the interpretation of our own psychology. The establishment of the logic of science in these realms is still imperfect by virtue of the same tendencies — admittedly far better disciplined — that gave currency to beliefs that seem to us preposterous in temper, absurd in evidence. Thus in retrospect the dual lesson bearing upon the psychology of conviction appears: first, that every advance in understanding is a step forward in logic, in the standards of evidence and the rigidity of conclusions, in the conceptions of plausibility and the discipline of the mind; second, that the forces inclining to belief persist, however altered their per-

spective, and continue to make the attainment of reasonable convictions and the consistent direction of conduct through them, a difficult and delicate task — the art of intellectual living. Wisdom is the name for the exercise of the logical function, with due recognition of the assets and liabilities of an ancient and fallible human psychology.

Such considerations make it pertinent to look upon persistences or revivals of beliefs continuing the older patterns of conviction, as survivals — never simple, often intricately disguised. Along with the older loyalties they incorporate the newer ones; particularly, they profess and in a measure maintain an adherence to high-grade logical standards. Their defection, however, is as commonly and as essentially a reversion to older psychological habits of belief as to a weakness in logical manipulation. Such "cases" of survival are most varied, indeed individual in composition. Interesting examples may be found in that wide domain already surveyed, belonging to psychology in a double sense: the one, that the content of the belief relates to the conceptions of thinking and the views of our psychic nature; the other, that the tendencies shaping belief in this realm are so characteristic of the "conviction" phase of our psychology. One of these "cases" and the most typical is the survival and revival of the belief in the possession of powers by some individuals in defiance or transcendence of the established laws and limitations of human endowment. So characteristically psychological is this conviction that the phenomena associated with it have received the name of "psychical research" — a term irrelevant or mislead-

ing, but harmless if accepted as a convenient phrase. As here considered there is no choice but to regard the belief-tendency thus displayed as an inclination toward the supernatural. This trait merits detailed analysis; its "cases" are difficult, sometimes baffling. For the belief persists in minds thoroughly loyal to scientific ideals in other realms. The "cases" contribute a further factor to the psychology of conviction, and raise the interesting question of consistency. They suggest the existence of reserved areas of belief, more or less exempt from the limitations of logic, where the satisfactions of belief may be more freely sought and accepted without logical compunctions. Such indulgences are more appropriately considered under the personal phases of belief; but they contribute essentially to the convictions that keep alive the "proofs" of telepathy as of other modes of mental communication unrecognized by psychology, and the evidence of survival after death at the hands or mouths of mediums. The logical interest lies in the elaborate technique which such convictions have developed in support of the hypothesis, and the continued vitality of the belief, despite repeated exposures of fraud in the accumulation of evidence and woeful defects in logic in the arguments. Much of the belief in the supernatural is based upon the conviction that the facts cannot be otherwise explained, that deception is impossible. Such assumption in turn has its reasons; they lie in the will to believe and the gross underestimation of what can be done by deliberate or subconscious deception.

It is fortunate that "cases" of belief in the super-

natural occasionally venture into the domain of the physical where their pretenses invite disclosure. Such detective service is in no way obligatory upon physicists and psychologists, even though their domain is intruded upon and their title challenged; it may be accepted as an obligation in the interests of social sanity, which any competent protagonist of science may properly undertake. Such is the "case" of Paladino. Reduced to barest outline, in the presence of Eusapia Paladino — a Neapolitan woman of peasant status — tables moved, curtains blew to and fro, tambourines rattled, while seemingly her hands and feet were controlled. Incidentally the large compensations for witnessing the performance filled her purse. All this exploitation is commonplace and sordid. Upon the inability of men prominent in one or another scientific field to detect how it was done, is reared the hypothesis that these occurrences demonstrate supernatural powers. When it is shown by counter-plotting that the "medium" disengages one foot and lifts the table on her toes, the entire logical construction tumbles ignominiously; but the "psychology of conviction" of the case, like the moral, remains. The relation between premises and conclusion before the convincing disclosure, and the tendency to build upon them the belief in the supernatural, are just the same as before. The factors in the case are the enormous influence of the prestige of the sponsors for a performance that without it would attract slight attention; the weak logical sense that interprets the inability to detect how a thing is done as strengthening an otherwise unsupported hypothesis; but last as first, the tendency be-

low the surface to accept the supernatural hypothesis is responsible for the "case."

This group of survivals, occupying the middle ground between old-time credulity and present-day controversies, is a fairly extensive one. It may be extended to include instances in which older conceptions are applied to newer problems with a weak sense of their incongruity. Such is the problem of animal intelligence. The inclination to ascribe to animals remarkable powers of mind is more creditable to human charity than to human logic; it is more a matter of sentiment than of logic. The science that speaks with authority on this issue is psychology. In view of the difficult steps by which man has slowly gained a critical knowledge of his own endowment and its workings, it is not strange that the like is true of his knowledge of the animal mind. Psychology has established how slow and laborious are the steps by which a decent logical control of data has been secured. The process is illustrated in the education of every child. Yet animal prodigies are placed on exhibition, and admiring audiences accept simple trick-performances as evidences of calculating horses, talking dogs, and educated animal geniuses. Learned books are written to prove that neither fraud nor self-deception has entered; the interest in the matter is so disturbing that commissions, on which professors of psychology serve, must be appointed to allay the mental unrest. Once more the discrepancy between performance and conviction is flagrant. A horse paws with his right forefoot (as horses do), and is taught to continue to do so until he perceives a signal to stop. The performer

advertises that the horse adds, subtracts, divides, extracts square roots, counts, tells people's ages, knows grammatical construction, and what not. (It should be added that a bright horse or dog is so keenly observant that owners of such animals may believe in the powers with the sincerity of self-deception.) The entire "case" would be ludicrous did it not furnish so neat an example of how conviction creates miracles, how readily prepossessions engender credulity, how inadequate is the popular notion of the foundation of the mental processes used by all, and how weak may be the logical sense that alone can protect against the acceptance of such performances at their alleged value. Even in the twentieth century the case of "mathematical horses" makes a distinct contribution to the psychology of conviction.

V

By this devious route we come to the present-day arena of contention in which opposing convictions, all professing a common loyalty to logical (or it may be to moral or æsthetic) principles, defend opposite conclusions, favor antagonistic policies, bid for support as rivals, and array men in parties and factions, in schools and sects, as well as in hostile camps and campaigns. The controversial area of the psychology of conviction is a close neighbor to those considered; their boundaries touch and overlap. The older motives reappear with chastened mien; the analysis proceeds more considerately of subtle error and delicate bias. The selection of "cases" is difficult by embarrassment of riches; for here lies the source of the saying: many men,

many minds. The desire is to tap the controversial current at its richest flow, to illustrate the variety of its contributory streams, the many sources of its hidden springs. As a triad of such issues, sufficiently typical and distinct, may be selected the "case" of indulgence, the "case" of the feminine mind, the "case" of militarism and pacifism. In the one issue there stand embattled the prohibitionists and those who favor a sane, even an indulgent regulation of such practices (admittedly a serious evil in excess) as the use of tobacco and alcohol; in the next, the feminists contending for a nullification of the restrictions in the movements and careers of women, minimizing the differences of the sexes and their inherent consequences, as opposed to those who believe these differences to be vital, comprehensive, and established; in the last the most intensely partisan arraignment by believers in peace, of the horror, waste, and unreason of war, by believers in war of the blindness, sentimentalism, and visionary impracticality of pacifists. The fact which the psychology of "controversial" convictions faces is that in the presence of the same data and comparable schooling and environments, men reach deviating and opposite conclusions. Each party believes strongly that he has definitely proved his case. Yet it cannot be doubted that in the main the minds thus in disagreement are fairly similar problem-solving instruments. They are not identical in nature nor mechanical in procedure. The human mind is by no means a loom receiving raw material, and with the pattern once set turning out a uniform product. For simple mathematical processes the formula holds; it makes no difference

what mind performs the calculation. In controversial issues and practical policies it makes the greatest difference what manner of mind receives, elaborates, considers, and concludes. The individual factor dominates and yet holds true to type. Differences of opinion as of policy and taste are not chaotic or capricious or arbitrary. Despite all fluctuations, reason in well-poised minds is an orderly procedure, and principles endure. The temptations to depart from such order are precisely the points of interest in the controversial phases of the psychology of conviction.

In explanation it is familiar that data known to one mind may be unknown to another, and that the importance attached to one group of data may differ in one mind and another. But behind all this and determining it is the predilection that selects and gives weight to groups of data of favorable bearing, inclines the interpretation to a predetermined bent, and reaches a conclusion more by reinforcement of an anticipation than by any progressive step; which means that it is not the force of evidence but the magnetism of conclusions that attracts. And this in turn is true because such specific predilections in regard to one issue or another are themselves the issue of a general perspective — compositely logical, moral, æsthetic, and practical — which determines the values of experience and arguments, that determine the set of one's convictions. We may call this character, we may call it a point of view or *Weltanschauung*, and bear in mind that this exists as really, though in less finished and articulate form, for the unsophisticated as for the learned mind. Indeed, one of the marked differences between them

is the relative immunity of the disciplined mind to the disturbances of emotional predilection and subconscious prejudice. Yet the best-schooled minds take their stand determinedly, with stanch convictions, claiming no exemption from human bias, but making allowance in their well-balanced judgments for the psychology of conviction as operative in themselves and in the world in which their influence makes itself felt. Any more intimate analysis requires the concreteness of a specific argument with all its ramifications and bearings, its traditional relations to custom and opinion. By considering the series of steps by which one arrays one's self on one side or the other of such controversies as those concerning prohibition, feminism, and militarism, one will realize the manner in which facts, arguments, experience, predilection, and one's general outlook upon the values and precepts of life, coöperate in the formation of positions, attitudes, loyalties — all of a practical order. In this estimate one must make large allowance for the persistent forces of convention, tradition, and imitation as individually operative; for these spread and fix conviction quite as they disseminate other habits of reaction. Parallel in importance remains the factor of a personal, emotional, temperamental congruity. Furthermore, in controversial questions where so commonly the data are imperfectly known and the arguments inadequately understood, convictions none the less proceed as confidently — possibly more confidently — under these limitations as in their absence. For doubt is an unpleasant state of mind, and the reaching of a decision and the taking of sides constitutes an indispensable type of satisfaction.

The incompleteness of this analysis of the psychology of controversy is obvious. It is intended only to prepare for the analysis of concrete cases; for the "case" method is the most instructive in this domain. Two possible factors are ignored: the one the element of intentional deception or the distortion of a biased interest; and the other the allied element of hypocrisy and inconsistency. These receive some attention under the consideration of the personal phases of belief; yet they play a specific part in controversial issues. In illustration the attitude toward education as a means of fitting the mind to play its proper part in life offers a pertinent example. The ordinary democratic view professes a cordial support of education and an admiration of the products of the trained mind. But actually it distrusts scholarship and deprives it of a reasonable share in social control. Such an attitude is one of suspicion masked by avowed confidence. It is an excellent and by no means isolated instance of the inconsistency between theory and practice, between profession and performance. Since most controversies have practical issues, this phase of the matter is often of decided consequence.

VI

We turn to the personal aspect of conviction, not as a novel factor (for everything is personal in the sense that there are no beliefs, only believers), but as a special emphasis. What men believe and why men believe converge in the satisfaction of belief — which is a personal reaction. The conviction once attained in conformity with one's psychology yields its satisfaction

in the removal of doubt, the support of conduct, the consolation of faith, the guidance by principles, the consistency of a system or point of view, and adds to these the contented feeling of adjustment. Such are the common functions of creed, sect, party, principle, code, custom, loyalties. The act of subscription, allegiance, enlistment, settles matters. Patriotism may be cited as a comprehensive expression of the issue, and raises the question in how far one's patriotism is a sentiment or a conviction. An American can with difficulty conceive his allegiance of country as otherwise disposed. Yet he knows that millions of his fellow-citizens of like nature with himself profess an adopted allegiance, while a divided one (neglecting the complexities of the great war) is wholly compatible with a proper consistency of purpose and attitude. All this is fairly well understood, for it operates close to the surface of our deliberations and our articulate sentiments. Following this trend, one might conclude that the desirable order of satisfaction is as obtainable from one type of belief as from another. Loyalty is everywhere similarly conditioned; the sense of attachment is the main thing and may be inculcated as readily upon the platform of absolute autocracy in government as of the freest democracy. It is not in such types of conviction that the distinctively personal factor is conspicuous; quite the contrary, it is in such larger loyalties — all supported by convictions — that the individual merges with the crowd, with the collective mass, and even surrenders to it. This, however, does not detract from the personal intensity of the convictions thus formed, nor from their efficiency. Upon the sentiment of patriot-

ism, and the conviction that one's country is in the right, is based the integrity of nations, even to the supreme sacrifice of the soldier. Defection in this attitude may mean mutiny and treason. It is a sobering reflection that the ultimate bond of nations, as everywhere the unity of a collective purpose, rests upon the integrity of the personal convictions of those enlisted. This is the fundamental reality and gives to the study of conviction its unique importance. That such personal intensity of conviction may come from any or many sources, must ever be borne in mind.

It is in the more individual affiliations and in the narrower circle of one's loyalties that the personal element appears in stronger relief. There is one system of psychology, with bearings upon the genesis and nature of conviction, that is entitled to precedence in our considerations. The psychology of Freud is reared upon the relation between motive and belief, upon the wish as father to the thought. In broader outline the Freudian system explores among the subterranean roots of motives to discover the promptings of thought and action. It emphasizes the subconscious; and it builds upon a group of mechanisms, by which the apparent, superficial stream of thinking is brought in relation with the deeper, hidden sources of its flow. To no mental product does the system apply more intimately than to convictions.[1] For the first and last things in

[1] The parallel applications of equal importance are to the free material of dreams, reveries, imaginative excursions (also to seemingly accidental lapses, like forgetting and mislaying) and to impulsive, aberrant conduct. All these orders of expression lose their detached character when supplied with the clue of motive. It is not necessary to accept the extreme Freudian interpretation, particu-

the Freudian psychology are motives; and the clue to conviction (beyond the realm of undisputed reason) is motive. In the view of Freud the mental life is a struggle — a conflict between what is, what we are, what we must do, what we should like to be and do, and how we should like to have things. So imagination enters to bridge the gap, and the fictitious pleasures of day-dreaming and of conclusions not untouched by delusion yield their satisfactions. Truly rationalization enters, and we justify our beliefs and acts by reasonings to conceal their real motives in emotion and desire. The mechanisms of thought are mechanisms of concealment — a psychological *camouflage;* reason masks emotion, in that the acknowledgment of the emotion is unpleasant or otherwise tabooed, while the appeal to reason is accredited and creditable. The masking devices are varied, some dramatic, others shrewd, others subtle. The most typical is the device of compensation. Lacking one satisfaction we minimize its loss by setting up another in its place. A salient example is that of a man of checkered and uncertain career, in all essential respects a failure in life despite conspicuous talents, who in announcing the subject of his personal reminiscences as a platform topic chose the title: "How I Achieved Success." That title is a Freudian confession of failure, disguised to the self that makes it. Similarly, if the German mind is prepared to stand by its Austrian (Freudian) ally in the psychological field, the Teutonic insistence upon the supe-

larly the reference of all these mental products to the motives of sex. The Freudian view is entitled to respectful consideration; it has proved suggestive in many directions.

riority of German "Kultur" may be interpreted as a Freudian confession of a sense of lack, the inability to achieve that delicate appreciation of the values of life that is characteristic of the French, or the well-poised directive capacity and clean-cut analysis of the English mind. The compensation is the gigantic and immodest delusion of superiority. Suspicion or accusation is often of the same nature, imputing to others motives present in one's self, but disowned. The same applies to apology in that it implies a self-accusation: *qui s'excuse s'accuse.* The conception of convictions as formed or supported by this mechanism of emotional transfer — in consolation or compensation — yields a restricted but authentic application of the Freudian principles. The Freudian mechanisms apply more fully to expressions of stronger, more original emotional tone — like the instinct of motherhood lacking its authentic outlet and seeking substitutes in the mothering of pets or causes; yet like these, convictions serve as a temperamental satisfaction by employment of similar devices. Other common Freudian factors may be noted. There is over-determination, overdoing — in excess of recoil (through some internal resistance or scruple) swinging far to the opposite extreme. The characteristically Freudian aspect of the issue is that the impulse to the extreme is felt, but the motive source remains subconscious; yet it operates and projects from its depths a sense of trouble and difficulty. Conviction may be held waveringly though longingly, shifting in successive devotion to fads and "isms."

The "conviction" aspect of the conflict is a struggle

for consistency as well as for contentment, which in its ripeness aims at the harmony of one's beliefs and conduct. Such a consistent whole is a personality, many-sided but single-minded. Thus in tracing the orbit of conviction, we constantly return to the emotional motive — an emotion close to will. The common name for this is desire, the Freudian *wish*. In so far as the Freudian diagnosis applies, it is the unfulfilled wish, the thwarted desire that shapes the true motive of conviction. It operates in so far as the belief is by nature or adoption warmly cherished, with a deep personal absorption; it is peculiarly applicable to extreme semi-pathological temperaments, in which the processes are emotionally intensified. But a more common Freudian mechanism peculiarly applicable to the genesis and support of convictions is rationalization, which is the justification of belief to reason. We actually believe by virtue of a trend anchored in personal desire, and have recourse to reason to mask this source — to clothe a personal conviction in more presentable garb. Accepting the motive as a "reason," we believe for one reason and defend conviction for another; such is the Freudian defensive and self-deceptive mechanism. In some measure the conviction may be unreasonable, yet it secures and maintains its hold by conformity to authentic psychological processes.

The mechanisms thus described in Freudian manner have been otherwise and previously recognized; the Freudian setting adds to their illumination and to their relation to our general psychology. In application to conviction, we must proceed more delicately, with discerning allowance for the type of conviction

involved. We recognize that we are committed to a certain pride in our rationality; we make claim to be reasonable beings; and for this end our dress-parade selves argue and defend as well as ignore and conceal. By quite the same route in practical matters, we admit that our interests come to determine our positions, though we know that scientific judgments must be disinterested and unprejudiced.

Intense conviction obscures vision; yet enthusiastic interest opens our eyes. We must accept the liabilities along with the assets of our own psychology. In Freudian aspect beliefs avoid contact with reality by surrounding themselves with a defensive smoke-cloud of security; in scientific employment, hypothesis and speculations extend the study of reality, alike in detail and in scope. Neither the one nor the other issue is necessarily involved nor readily avoided. In consequence the consistency of the varied convictions of all sorts and conditions of men on all sorts and conditions of questions is a partial one. An equal consistency in all one's varied interests is an attainable but rare ideal, possibly not even a desirable one. A common form of inconsistency suggests the hypotheses of reserved areas of conviction in which predilection may disport itself in freedom from the restraints of too rigid a logic. It is possible that a man of science may be cautious and logical in his special domain, but in matters outside of it, in which a personal bias enters, he may be uncritical, even credulous, and accept or propose arguments fallacious or weak. Such defection constitutes the personal factor in the prevalence of the "survival" types of conviction already reviewed. The hypotheses of "re-

served areas of belief" applies characteristically to the spiritualistic phase of "psychical research" — that is the acceptance of evidence of the communication by the departed through mediums; it applies particularly to the "case" of Paladino, while yet this "case" is made by the prestige attaching to the scientific reputation of her sponsors. The hypothesis applies sporadically through the several incidents that have attended the renaissance of spiritualism since 1850. Inclination to accept the spiritualistic belief is the main factor; the evidence plays a secondary part. Those responsible for such evidence contribute to the psychology of deception,[1] as the deceived contribute to the psychology of credulity. This holds for the vast majority of believers; but for the few and the leaders of the movement, the conviction suggests the operation of a reserved area of belief. Whether the reservation is due to a Freudian complex is an individual question.

There is a further aspect of such allegiances: namely, the attraction which a belief excites by its very departure from rationality; the tendency is due to the lure of the obscure. Its most philosophic expression is mysticism. But the coöperation of other factors is apparent. Such occult and irregular beliefs grow by contagion; they grow by prestige; they grow by a congenial

[1] I have considered these problems in an earlier volume, *Fact and Fable in Psychology* (1900), particularly in the earlier chapters. Accordingly the types of belief in which credulity, intentional deception, and weakness of logical sense play the leading parts in the dissemination of false beliefs, are not emphasized in the present consideration. The portions of the volume just referred to may be accepted as an amplification of this position, in terms of analysis and illustration.

selection of adherents; and a factor in the last contribution is the satisfaction of clinging to the esoteric, of belonging to a different order, a less conventional cult than that which secures the adherence of the ordinary man. Even radicalism makes its converts by some measure of such appeal. But simple credulity, or logical weakness is never absent, and constitutes a personal factor in the issue. Consider such a belief as that in phrenology, which is fairly modern and persists with revivals to recent times. What the attraction of such a belief may once have been or how it continues to exist, albeit with lowered caste, is not easy to determine. Lack of scientific training may be the chief factor in its spread; but each such belief offers the problem of how this particular belief selects its recruits. The same is true of homœopathy. In both cases those who follow the system may have difficulty in describing either the basis of the principles, or their own adherence to them. Such excursions into the history of personal attachments might add to the psychology of conviction; but their pursuit leaves the central problem of the present study. Obviously such beliefs linger with a low vitality, and the change of their clientèle suggests the degeneration of a city neighborhood when a residential district loses its prestige.

Continuing in the direction of the irregular, we come to beliefs that may properly be called pathological. Such beliefs are so strikingly individual that they are ordinarily not shared by others. They are called delusions and are characteristic of insanity in its various forms. Here the personal factor reaches its maximum scope. Such delusions may likewise appear as Freu-

dian compensations; their modes of rationalization are so irregular that therein is recognized the mental aberration which represents the extreme issue of personal conviction in its deviation from logical standards. The manner of reaching one's convictions as well as the convictions reached thus become a criterion of one's sanity. Such (delusional) beliefs do not affect others; nor are they taken seriously. The rare "case" in which an individual belief of this type plays a part in a system of wide acceptance in modern times is supplied by the case of Mrs. Eddy. Her personal delusion of a "malicious animal magnetism" runs through "Christian Science" so far as that system reflects her life-history. She accused disciples who had escaped from her influence, of this peculiar form of sorcery (mental poisoning, she called it), and took all sorts of precautions to avoid its dire effect. Naturally the great mass of her followers ignore this strange belief; yet their attitude to the tenets promulgated by Mother Eddy, if consistent, implies a subscription to this belief also. The inclusion of Mrs. Eddy's belief in malicious animal magnetism is accordingly pertinent to the personal and pathological aspects of conviction.

VII

The practical issue of the operation of these several coöperating and conflicting factors is the tolerance of all manners of convictions and compromises and makeshifts in the mental household. No one is completely logical, and no one is devoid of the logical impulse and a certain logical consistency. But the psychological trend runs more deeply, more perva-

sively. Conviction appears as a compromise of logic with psychology. The solution of our problems depends not alone on the discovery of truth, but on the control of the means of securing its acceptance. To gain for beliefs their proper recognition amid the rivalry of convictions and of the forces sustaining them, is an art. The slowness and laboriousness of human progress is a direct consequence of these conditions and limitations of the human mind. The acceptance of new truth meets with all sorts of oppositions and resistances, which though collectively expressed are individually experienced. The conflicts of men, as of nations, take place in the arena of personal conviction. Purposes, policies, jealousies, ambitions, sentiments, converge in the formulation of a conviction, which may be as simple as a slogan and as complex as a destiny.

Viewed retrospectively, the greatest triumph of the human mind was the gradual removal of large areas of belief from the influence of the personal psychology of conviction. Scientifically established truth came to proceed objectively, undisturbed by interest in the outcome of inquiry and determined by the sanction of verification. The gradual disestablishment of the anthropocentric view of the universe culminated in the removal of human desire from its place of dominion in the formation of belief. The process is but partially accomplished even in disciplined minds, and for the great masses of men plays a subordinate part in the scheme of their lives. Moreover, the existence of so many controversial issues, in which conclusions are far from clear and yet action is demanded by condi-

tion, imposes the exercise of judgment upon mixed motives of logical loyalty and psychological appeal. For all these reasons the understanding of the stream of influences that play upon the genesis and shift of conviction is a permanent occupation of the psychologist. The obligation to seek control of human convictions through a study of their nature applies with peculiar force to twentieth-century conditions in which a sentiment of democracy prevails; for democracy imposes or encourages the consideration of convictions by inviting adherence to parties and confirming the verdict of the ballot. Democratic forces operate far beyond the political realm; there is hardly a page of the daily press that does not make an appeal to men's actions by prevailing upon their convictions. Rival newspapers bring to their selected clientèle the reinforcement of convictions already espoused. Towering above all other issues are the set of convictions that have arrayed the dominant nations of the world in a colossal life-and-death struggle. The world-war is a war of convictions, tragically consigned to the ordeal of a scientific armament of destruction; and the decision, however reached, will establish one set of convictions in the minds of men, and depose its rivals. Once the normal relations of men and nations again prevail, we shall be able to look back upon the struggle with the saner logic of a scientific judgment. While the awful struggle continues and in its progressive steps, we become the passionately interested witnesses of the play of psychological forces on the largest scale that has ever been enacted. Parallel with the clash of armament is the conflict of conviction; both will participate,

and presumably the latter with greater influence, in the negotiations of peace — in the restoration of a normal outlook upon the values of life and their control by sane convictions.

II

BELIEF AND CREDULITY

The introductory essay has set forth that the approach to the psychology of conviction is through the portals of logic. The individual faces the problem in the question: What beliefs shall I accept and what reject? The principles determining selection and rejection at once engage the student; for their function is not only to determine the critical standards, but to defend them. The fixation of belief as a practical process, which each shares as well as witnesses, must be studied not only as a process, but in terms of its foundations. The present study undertakes a critical survey of these foundations. In its course it uses the method of contrast to illustrate the consequences of defection in the logical standards of evidence. While the central issue is the logical principle of fixation, the determination of the logically acceptable is the natural completion of the problem. Right belief and credulity refer to habits of mind as well as to standards of evidence. Their joint consideration determines the course of argument.

I

The vital history of human development is to be sought in the history of beliefs. The inscriptions of Egypt or of Babylon, though rendered in modern tongues, speak an imperfect message until illuminated by some insight into the beliefs which these cultures

cherished. The amazing ruins of Copan, the serpent mound of Ohio, remain mute and inglorious until we solve the riddle of the beliefs of their builders. Dead Pompeii becomes a living city when we people its streets with the hopes and fears, the beliefs and opinions of its last inhabitants. The history of the arts and the sciences, of society and of religion, specifically involves an account of the succession of beliefs and of the growth of belief-habits. The story of men's doings is likewise, in large measure, a reflection of their beliefs; conduct, whether of individuals or of masses of men, remains an undeciphered record until interpreted as the concrete expression of definite beliefs. The spring of action is motive, and the intellectual impetus to motive is belief.

Of the outward and of the inward marks of the stages of learning none are more notable than the beliefs which as the result of such learning come to be accepted and promulgated. With these is associated an attitude of inclination or disinclination in regard to the various and ever-enlarging problems that engage the interests of men. The possession of certain beliefs and a definite belief-attitude differentiates the educated from the uneducated, the scholar from the dilettante, the expert from the layman, the modern spirit from the mediæval, the traits of this generation from those of its immediate predecessors. For those who would search out the motives and the justifications of their beliefs, it is of constant importance to realize the more potent and the more patent tendencies and influences by which are shaped the opinions alike of the many and of the few; to consider the characteristics which give

to certain beliefs and belief-attitudes their logical cogency, their ethical worth, and their social power, and deprive other classes of beliefs from any possible participation in these values. Such an inquiry naturally includes an outlook upon the regions of unwarranted belief, of error and prejudice and credulity.

An attractive approach to the problem thus suggested may be found in a remarkable essay by C. S. Peirce.[1] Belief is presented as a mental trait possessing and developed by plain advantages of an evolutionary or adaptively useful kind. Such at least would be the case for all simple and practical matters upon which the incipient rationality of primitive man cut its teeth. Logicality, Peirce tells us — and by that is meant a habit of mind that leads to the detection of truth, to thinking about things as they are, to bringing our thoughts into agreement with reality — "logicality in regard to practical matters is the most useful quality an animal can possess, and might, therefore, result from the action of natural selection; but outside of these it is probably of more advantage to the animal to have his mind filled with pleasing and encouraging visions, independently of their truth; and thus, upon unpractical subjects, natural selection might occasion a fallacious tendency of thought." Natural selection certainly has not interfered with the persistence of untrue and illogical beliefs. While some truthward tendency is clearly a part of the natural endowment of *homo sapiens*, such tendency by no means dominates his mental habits. Indeed, it is brought to its fruitage

[1] "The Fixation of Belief," *Popular Science Monthly*, November, 1877.

only after so much struggle and the learning of so many hard lessons of experience and of such slow accumulations of ages of thinking, that it may be appropriately described as an artificial, weakly possessed, and imperfectly disseminated acquisition. Furthermore, practicality, like much else, is a matter of degree; groups of ideas and ways of thinking are more or less practical, and influence action more or less indirectly and by variously roundabout paths; as the range of human thought widens and diversifies, deepens and becomes more complex, an ever-enlarging circle of human interests and concerns comes to be of this indirectly practical kind. Precept and practice, instead of being connected by a short and straight, stout cord, are no less effectively bound by a complicated network of strands, many of them delicate in texture, elaborate in weave, and difficult to trace. For present-day purposes we may consider belief as characteristically of this type — complex in structure, subject to endlessly varying influences, modifiable by diverse factors and circumstances, responsive to social, hereditary, educational, and transitory as well as to more permanent, natural, and artificial influences.

A prominent result and indeed a purpose of belief is the concordant settlement of opinion. Yet this result may be brought about — has often been brought about — by other than logical processes; or, speaking with reference to the experience of history, it may be said that it proceeds by methods which are condemned by the most approved logical (and ethical) sanctions of more advanced stages of knowledge, though it receives the endorsement of the cruder and less enlightened at-

titude of the period. For every work of science — and something analogous is true of other progressive movements — "great enough to be remembered for a few generations, affords some exemplification of the defective state of the art of reasoning of the time when it was written; and each chief step in science has been a lesson in logic" (Peirce). Of distinctive methods of fixing belief Peirce describes four: the method of tenacity, of authority, of inclination, of scientific verifiability. The first, when stated baldly, seems devoid of all merit; yet it expresses in extreme form a tendency which the student of belief is certain to encounter. The man of tenacity proceeds upon a faith that the opinion which he holds is the truth, that it is his duty to affirm this conviction, to reiterate it and to cherish it, to refrain from entertaining any considerations which may tend to shake the belief, and to seek all the influences that may strengthen it. Naturally this does not remain a coldly intellectual process, but becomes suffused with an emotional intensity which leads the devotee to look with pity or contempt or horror upon any contrary opinion; even to scorn "weak and illusive reason," and to take refuge in the calm satisfaction of a firm and immutable faith. "When an ostrich buries its head in the sand as danger approaches, it very likely takes the happiest course. It hides the danger and then calmly says there is no danger; and if it feels perfectly sure there is none, why should it raise its head to see?" (Peirce.)

Such an attitude is possible only to an intellectual recluse and, to be consistently maintained, must be kept remote from earthly realities. Even when re-

served for non-practical considerations, it breaks down under the social impulse; man was not meant to live alone and neither feels, acts, nor thinks alone. A common influence is necessary to fix men's beliefs alike, and the most expeditious method of producing a consensus of opinion has proved to be that of imposed authority. History is too full of the triumphs and the failures of this method — both equally sad to contemplate — to make it necessary to bring forward illustrations of its procedure. Dogma and manifesto, the trial for heresy and the Index Expurgatorius, the Inquisition and the stake, scholasticism and pedantry, the literalism of the expounders of the Scriptures or of the commentators of Aristotle, the refusal of the orthodox to look through the telescope to see what they had no authority for observing, or the *E pur si muove* of Galileo — bring to mind realistically the heroic scenes of the dramas for which the method of authority furnishes the common plot. The limitations of this method are certain to be irritatingly felt by the few, however lightly tolerated by the many. The saving remnant that enjoys a wider outlook, and penetrates the mist with which dogma has enveloped the atmosphere, realizes that infallibility is theoretically an idle dream, and practically an artificial fiction: and in so far as others use their eyes and look in forbidden places, they observe that many of the beliefs of men do not fall under the shadow of the pronunciamento, but thrive in the sunshine of common sense. And if this be true of some opinions, why not of others? Unless doubt and questioning and inquiry on all subjects be utterly suppressed, the error of imposed authority will be suspected, the

means whereby a sounder belief may be discovered will be at least dimly realized, and some resort to other methods of shaping belief be attempted.

But even when freed from the fetters imposed by authority, the minds of the leaders of men have not always followed in the footsteps of wisdom. They have been prone to overlook the tyranny of their own organization and inheritance, and have come to accept a more liberal and humane dictator and one of their own seeking — but a dictator none the less. They believed what was agreeable to reason; they accepted that to which they naturally inclined; and the philosophers of cultivation inclined to beliefs that were plausible, or comforting, or stimulating, or uplifting, or liberalizing. Congenial spirits found one another or a common leader, and schools of opinion came and went. The pendulum swung now this way and now that; here a dominant leader impressed his personality strongly upon his contemporaries; there a reaction from an extreme doctrine induced attention to new lines of thought; everywhere opinion came to be more responsive to influences from without, from practice and experience, from custom and institution. But whatever progress results under this régime is fitful, and hazardous, and ill-defined; it is only when the causes of our inclination are scrutinized and the objective worth, not the agreeableness, of our reasoning comes to be regarded as of primary import, that the pursuit of knowledge, and the fixation of belief in which it results, realize their allegiance to a higher power. Strange gods have been worshiped in strange ways by the followers of their inclinations; the intuitionalists and the mystics

and those who believed themselves inspired — though the inspiration of one was folly and anathema to another — have therein found exercise for their inalienable right to liberty and the pursuit of happiness. "Truth," Lowell explains, "is said to lie at the bottom of a well for the very reason, perhaps, that whoever looks down in search of her sees his own image at the bottom, and is persuaded not only that he has seen the goddess, but that she is far better-looking than he had imagined."

The method of scientific verification has been so wrought into the fiber of our thinking that we find it difficult to realize the power and dominion of other sovereigns; we the scientifically minded are the Hellenes, and the others are the *barbaroi*. And rightly so; for the credentials of our sovereignty are the rewards of generations of patient study of the ways of nature, sanctioned by the logical anticipation of natural events, by the practical utilization of natural principles, by a conscientious, impartial, and objective analysis of our own mental processes. For the scepter in the hands of science is neither a symbol of wanton authority, nor a badge of unearned privilege, nor a license for extravagance and caprice, but an emblem of law and order — safeguarding to all the most cherished opportunities for right knowledge, right beliefs, and right actions, in what measure each is wise enough to consent to be thus governed. It is the prerogative of the scientific method that it enthrones the logical right — the true — as the moral law within enthrones the ethical right — the good. The crowning virtue becomes not conviction, nor the approval of authority, nor acceptability, nor

general credence, but provability. The adoption of this as our sovereign method alters our ideals, even where it modifies but little our practices; it radically transforms our belief-attitude and our outlook, even though we cannot as yet apply the one nor enter into possession of the other.

Yet we must not complacently assume that the advantages are exclusively incorporated with the one method, or that its adoption is unencumbered with conflict and sacrifice. We shall continue to feel the natural proneness to shape our beliefs by other and less strenuous standards; we are unwilling to, and we need not, abate our appreciation of what the other methods have accomplished in the trials and tribulations of the past. We cannot lightly shake off the tenacity of our convictions, however obtained, nor the inertia that easily, and the incapacity that necessarily, appeals to authority; we shall continue to yearn to believe what is agreeable and to resist unpleasant truths; we may still reserve some corner of our belief-chamber which shall be exempt from the intrusion of inquiry; but, on the whole, however we may defend these tendencies, or apologize for them, or struggle against them, we make some decent attempt to clothe them with the semblance of plausibility and to present them garbed in fashion scientific. "Yes," Peirce admits, "the other methods do have their merits: a clear logical conscience costs something — just as any virtue, just as all that we cherish, costs us dear. But we should not desire it to be otherwise. The genius of a man's logical method should be loved and reverenced as his bride, whom he has chosen from all the world.

He need not condemn the others; on the contrary he may honor them deeply, and in so doing he only honors her the more. But she is the one that he has chosen, and he knows that he was right in making that choice. And having made it, he will work and fight for her, and will not complain that there are blows to take, hoping that there may be as many and as hard to give, and will strive to be the worthy knight and champion of her from the blaze of whose splendors he draws his inspiration and his courage."

From this survey of the methods by which opinion comes to be established and disseminated, we emerge with an appreciation of how it arises that the history of belief — not unlike history in general — is an affair of war and peace; that it deals, on the one hand, with the accounts of the warfare of the scientific method with its rivals, and, on the other, with the internal development, the institutional absorption, and the colonization of its own spirit among outlying cultures. "Logic," Mr. White reminds us, "is not history. History is full of interferences which have cost the earth dear. Strangest of all, some of the direst of them have been made by the best of men, actuated by the purest of motives, and seeking the noblest results." And in the same strain Morley: "It is surely the midsummer madness of philosophic complacency to think that we have come by the shortest and easiest of all imaginable routes to our present point in the march; to suppose that we have wasted nothing, lost nothing, cruelly destroyed nothing on the road."

From a consideration of the principles by which belief may be rightly and rationally fixed, we proceed

to a contemplation of these principles in action. Counsel may be wise, but not practical. We know that the actual formation of true belief is beset with serious difficulties; that the process is likely to be a response to a condition of affairs rather than to a statement of theory. Yet, though it be a condition and not a theory that confronts us, a knowledge of the theory may be the most effective armament for meeting the condition. If knowledge is power, it is as much because method is better than shift as that acquaintance with fact is better than ignorance. Now that science has entered into her kingdom and the vastness of her domain is willingly recognized, — for in a vital sense all that may be known by human ken, supported by evidence, presented in orderly arrangement, related to other knowledge, and developed by further study may be called science, — the busy problem is the infusion of the scientific method into all our ways of thinking, its application to all the various kinds of beliefs that affect our ideals, our working conceptions, and our actions. In so far as this is accomplished there is developed a scientific-mindedness, a rationality and symmetry of judgment, which shall give to the conception of what is possible and what impossible, what probable and what improbable, what established and what disproved, a maximum of clearness, soundness, accuracy, and practicality. It is this habit of mind that makes one keen-scented for right beliefs and secure, not from error indeed, but from rash credulity.

It would be most unscientific to overlook the fact that many departments of human interest are not ready for — and in their nature may not be readily subject

to — the concrete and exact application of the scientific method. But this recognition offers no excuse for removing such classes of beliefs from the influence of the rationalizing spirit and of the same scientific habits of mind that have created such a beneficent and stimulating atmosphere in more exact realms of thought. Such an influence results in what may be termed a belief-attitude; and this in turn is reflected in one's standards of evidence, contributes to one's expertness of judgment, determines one's inclination or the will to believe. Yet this consummation is compatible with diversity among the opinions of the wisest as well as to the more glaring disagreements of all sorts and conditions of minds. But where there is accord in regard to a general fundamental method, such diversities are not to be feared. What Lord Morley aptly notes of personal companionship — that its painful element is not difference of opinion, but discord of temperament — is equally true of intellectual pursuits in general. "Harmony of aim, not identity of conclusion, is the secret of the sympathetic life." Such differences of opinion fall within the range of valid beliefs. Those that do not — and many of them fall beyond the pale because of their discord of temperament, their alliance with other methods of fixing belief — may be variously characterized as prepossession, error, fallacy, superstition, extravagance; and for the habits of mind that tend to the acceptance of false beliefs the terms illogicality and credulity are apposite. The former is commonly understood as referring to the proneness when confronted with the premises to draw false conclusions therefrom; the latter as a too great readiness

to accept the premises on insufficient evidence. Yet in practice they are often found as close companions and appear at the summons of prejudice, ignorance, inertia, and of that weakness of judgment and vacillation of standards of belief that flourish, weed-like, when the scientific habit of mind is not assiduously cultivated.

It is important to demonstrate that the forces that have been most productive of error in the past are not wholly shorn of their strength in the present; that the tendencies to act upon data credulously, with perverted logic and distorted evidence, however different the fashion of the garments in which they are paraded, are still recognizably the same persistent human frailties that detract from the complete appropriateness of the definition of man as a rational animal. It is further to be noted that quite too many of these misdemeanors are laid to the charge of ignorance; in truth ignorance cannot usually prove an alibi, but what remains to be discovered are the influences that prevented the dispelling of the ignorance, and therein will be found the *vera causa* of the credulity. Lecky reminds those who would investigate the causes of existing beliefs that a change of opinion is apt to imply, more than anything else, a change in the habits of thinking. "Definite arguments are the symptoms and pretexts, but seldom the causes of the change." "Reasoning which in one age would make no impression whatever, in the next age is received with enthusiastic applause." As we travel in retrospect along the stepping-stones from myth to science, from credulity to logicality, we find rather little disproof and very much outgrowth.[1] It is because we

[1] What Dr. Holmes observes of the homœopathic extravagances is characteristically true of many another error. "Were all the hospi-

have a more appropriate, that is, a truer way of regarding a certain cluster of phenomena, that we discard the old way; and this truer conception, reached partly by new fact, partly by new argument, partly by new insight, partly by new applications of method, is the logical legacy which the successive "heirs of all the ages" — each in turn "in the foremost ranks of time" — bequeath to their descendants.

It is not easy to reach a decision in regard to the erroneous views of the past, as to how far prepossession blinded men to actual evidence, how far decisive facts were not available, how far logical methods were weakly handled; each of these was frequently present and acted both as cause and effect. This, however, is deserving of emphasis: that when the method of science is put in the first place, significant facts will be observed and looked for, arguments pro and con will be weighed, the dangers of prepossession will be realized. Not that this will always be done wisely and well, nor that error will necessarily be avoided; but that the steps that are taken, even though they be small and tentative and meandering, are more likely than by any

tal physicians of Europe and America to devote themselves, for the requisite period, to this sole pursuit, and were their results to be unanimous as to the total worthlessness of the whole system in practice, this slippery delusion would slide through their fingers without the slightest discomposure, when, as they supposed, they had crushed every joint in its tortuous and trailing body." "Many an error of thought and learning has fallen before such a gradual growth of thoughtful and learned opposition. But such things as the quadrature of the circle, etc., are never put down. And why? Because thought can influence thought, but thought cannot influence self-conceit; learning can annihilate learning, but learning cannot annihilate ignorance. A sword may cut through an iron bar, and the severed ends will not unite; let it go through the air, and the yielding substance is whole again in a moment." (De Morgan.)

other method to be in the right direction. Our scales may be crude, our weights only approximate; but even so, the result is more likely to be trustworthy than if we abandon them and resort to guesswork, or, retaining them, put down a fist on one end of the beam.

It thus seems proper to speak of the combined logical and psychological weaknesses that tend to the acceptance of unreal evidence and of irrelevant explanation as credulity; and the problem of problems, alike in the voyages of discovery and in everyday cruising on waters great and small, is to equip the pilot to steer his course by right belief and not by credulity. The intellectual mariner's compass, for all purposes alike, is the method of science; none the less pilotage is an art. Many shores are imperfectly charted; there are reefs and shoals, storms and fogs, breakages in the machinery and lack of training in the crew. These are the dangers of the seas — and shipwrecks are not uncommon; but how much more imminent the dangers, and how almost impossible the traffic, without any compass or with a less reliable one! It is the worthy ambition that brightens the hopes of many a scholar to contribute some aid to the extension, the greater availability, the greater convenience and safety of the highways or of the equipment of intellectual navigation.

II

The central purpose of this study is to indicate the foundations of scientific belief. These, like piles driven deep down below the surface, are often unconsidered by those who use the structure which they support.

Equally is it the purpose to consider the habits of mind that lead to the guidance of conduct by scientifically minded conviction. A notable defect in this respect is credulity — a common quality, but cogently or dramatically illustrated only in terms of somewhat elaborate pretenses accompanied by some measure of successful currency. When thus presented, credulity is paralleled by deception; there must be deceiver as well as deceived. This complicates the issue without adding notably to the psychological interest. In addition, the two rôles may be united, and there results self-deception, which in turn may vary from a fairly plain to a decidedly obscure diagnosis.

Retrospectively credulity attaches to the formation of beliefs under outgrown standards. A weak logical sense inheres in them; but more positively they result from prepossessions, which means a willingness to dispense with logical requirements in the interests of a cherished conviction. Examples of the one type are easily found by going back to older systems of thinking.[1] The more dramatic types of credulity are to be

[1] A credulous age or a credulous standard of belief finds expression in the acceptance as true of reports or statements contrary to fact, and again of interpretations of facts or evidence contrary to sound reason or plausibility. In the former case the lack is the criterion of evidence, in the latter in the criterion of proof. The former is more closely related to ignorance, the latter to prepossession; the combination of the two is common. The belief in unicorns, mermaids, sea-serpents and all manner of travelers' tales represents the one type; beliefs in fossils as shells carried and dropped by Crusaders, in horoscopes, palmistry, the elixir of life, the conversion of baser metals into gold, as well as such projects as rain-making, perpetual-motion schemes, or again calculating horses, and clairvoyant mediums. Such examples of psychological fables or myths and again of psychological fallacies or delusions are touched upon in various studies in this volume.

found in cases of deliberate deception. Though often sordid in motive and ingenious in execution, they deserve attention. A few instances are as instructive as many, and may be presented as standard examples. In approaching them, we may stop to consider the sources of credulity, in so far as it inclines to error or weakens the inclination to rationality. Credulity is shown in an uncritical acceptance of statements. There is no simple rule for its avoidance, no automatic switch that makes connection when truth presses the button, but refuses to work for the touch of error. There is the possibility of reaching principles that guide judgment. One must consider both the statements and the source. A man may deliberately lie; he may belong to the class to which Huxley refers when he speaks of "the downright lying of people whose word it is impossible to doubt"; he may be more or less consciously or subconsciously misled by his imagination; he may be hopelessly deficient in his powers of observation, or in his knowledge of fact, or in his capacity to handle evidence and argument; and none of these ethical or logical shortcomings seems to interfere at all in certain persons with their powers of holding and publishing opinions on all manners of subjects — even on those on which no human soul has the possibility of possessing knowledge. It is also important to note how far the issue involved is a matter of fact or of the interpretation of fact. Both fact and its interpretation, or arguments, appear as prominently on the side of error as of truth; yet, though not reducible to anthropometric measurements, the physiognomies of the two are recognizably different to the trained observer.

It seems ludicrously easy to collect facts of any desired quality and to point them in any desired direction. Dr. Holmes effectively describes these abuses: "Foremost of all, emblazoned at the head of every column, loudest shouted by every triumphant disputant, held up as paramount to all other considerations, stretched like an impenetrable shield to protect the weakest advocate of the great cause against the weapons of the adversary, was that omnipotent monosyllable which has been the patrimony of cheats and the currency of dupes from time immemorial, — Facts! Facts! Facts!" Yet in the crucible of logic it is possible to separate the dross from the gold. The arguments employed have a like suspicious appearance: they "have been so long bruised and battered round in the cause of every doctrine and pretension, new, monstrous, or deliriously impossible, that each of them is as odiously familiar to the scientific scholar as the faces of so many old acquaintances, among the less reputable classes, to the officers of police." The former type of credulity — the rash acceptance of facts — is the more simple and the more usually considered; the latter type — the rash acceptance of explanations or interpretations of facts — is frequently the more vital and instructive. Ingenious and successful lying is doubtless a fine art; yet the more difficult part of it is the gaining of credence for one's inventions. That depends largely upon the belief-attitude of the public and upon the psychological climate in which they live. It is quite obvious that the conscienceless prevaricator or charlatan must play upon the prejudices and vanities and ignorance and cupidities of his clientèle. He presents what they

wish to believe, appeals to their passions and emotional weaknesses, and when necessary berates his opponents with no gentle hand, and indulges in what Huxley speaks of as "varnishing the fair face of truth with that pestilent cosmetic, rhetoric." But the psychologist's interest is predominantly on the other side, with the duped rather than with the knave, especially when contagion has a fair field and judgment is lost in a psychic epidemic of credulity. Such we are apt to associate with dark ages and ignorant communities, with isolated cultures and inhospitable mental climates. A few instances from the days of the telegraph and the omnipresent daily paper may accordingly be the more instructive.[1]

[1] Dr. Holmes's *Homœopathy and its Kindred Delusions*, first published about sixty years ago, was substantially a study of credulity as applied to medical matters. Readers of this will recall that besides the minute exposure of the baselessness of the Hahnemannian cult, there are there considered (1) the royal cure of the King's Evil; (2) the Weapon Ointment and the Sympathetic Powder, the first rather lukewarmly considered by Bacon, the latter brought into notoriety by Sir Kenelm Digby; (3) the Tar-Water mania of Bishop Berkeley; (4) the history of the Metallic Tractors, or Perkinsism. These are thus summarized: "The *first two* illustrate the ease with which numerous facts are accumulated to prove the most fanciful and senseless extravagances. The *third* exhibits the entire insufficiency of exalted wisdom, immaculate honesty, and vast general acquirements to make a good physician of a great bishop. The *fourth* shows us the intimate machinery of an extinct delusion, which flourished only forty years ago; drawn in all its details, as being a rich and comparatively recent illustration of the pretensions, the arguments, the patronage, by means of which windy errors have long been, and will continue to be, swollen into transient consequence. All display in superfluous abundance the boundless credulity and excitability of mankind upon subjects connected with medicine." The account of Perkins and his Metallic Tractors falls in well with the instances here considered.

III

The name of Leo Taxil — a pseudonym for Gabriel Jogand-Pavés — may be unknown to many readers; it should not remain so, for the judgment which has been pronounced upon Mme. Blavatsky — also a modern of the moderns — may with modifications be applied to Taxil; that he "has achieved a title to permanent remembrance as one of the most accomplished, ingenious, and interesting impostors in history." Only Taxil's accomplishments were of a rather gross order; his boldness surpassed his ingenuity; and the interest is centered in his deeds rather than in his personality. Like most disciples of Cagliostro, his career was a checkered one. In 1885, at the age of thirty-one, he was engaged upon his *magnum opus*, having already appeared as a violent radical in politics, — he is a product of France, — a rabid anti-clerical, and the author of a libelous pamphlet on the "Secret Amours of Pius IX." The suggestion for his *chef d'œuvre* was the encyclical of Leo XIII (1884) directed against the Freemasons, who with others were placed under the ban as subjects of the realms of Satan. After a full confession of the errors of his former ways, Taxil was received back with rejoicing into the bosom of the Church, and thereupon published four volumes of wholly imaginary revelations, revealing the sacrilegious orgies and devil-worship of the Masonic mysteries. For this he received in person the solemn benediction of the Vatican, as well as the material rewards of the sale of one hundred thousand copies of his work and the honor of its translation into English, German, Italian, and Spanish. If it be stated that the German version

omitted the volume on the "Masonic sisters," for the reason that it was not thought proper to outrage the moral sense of the community by recounting "the filthiness of the hellish crew," the character of the work may be surmised. Taxil extended the sphere of influence of his imaginary devil-worshipers to all parts of the world — even from Singapore to Charleston, at which latter point the Masonic Grand Master figures as a Satanic Pope, who has at his disposal a telephone, invented and operated by devils, whereby he puts a girdle round about the earth in forty seconds, and a magic bracelet by which he summons Lucifer at his pleasure. Intoxicated by his success and the credulity of his adherents, Taxil's invention runs riot; and he tells the story of a serpent inditing prophecies on the back of a demon who, "in order to marry a Freemason, transformed himself into a young lady, and played the piano, evenings, in the form of a crocodile." Taxil gained confederates in other countries, who contributed to the movement according to their several needs and talents. One of the most interesting figures in the story is the fictitious personage, Diana Vaughan — the *pucelle* of the drama and of its *dénouement*. She was given out to be the descendant of Thomas Vaughan, the seventeenth-century mystic, and the goddess Astarte; her Luciferian origin and principles were shown by her horror of all religious observances, by the devils who attended her, and through whose aid she made excursions to Mars, where she "rode on Schiaparelli's canals, sailed on the Sea of the Sirens, and strolled among the gigantic inhabitants of the planet." Many remarkable incidents of her curious personality are retailed for the

benefit of the believers; while poetic justice is appeased by her final conversion to the Church through the instrumentality of the spirit of Jeanne d'Arc.

When it became necessary to materialize Diana Vaughan for the benefit of the privileged few and to satisfy the skepticism of others, she was cleverly impersonated by "a bright American girl, employed as a copyist in a Parisian typewriter establishment, who wrote all the letters at Taxil's dictation and received a monthly salary of one hundred and fifty francs for her services." This was hardly a fair appreciation of American talent, considering that the money remitted to Diana Vaughan in ten years amounted to more than half a million francs. In 1896 Taxil was a prominent figure in a great anti-Masonic congress held at Trent, where indeed he was treated as a hero and a saint. On April 19, 1897, in Paris, there was held by invitation of Diana Vaughan a highly sensational function, at which it had been announced that the miraculous lady would appear. When the moment arrived, Taxil stepped forward and said: "Reverend Sirs, ladies and gentlemen! you wish to see Diana Vaughan. Look at me! I myself am that lady." Then followed an explicit account of the twelve years of imposture and an impudent expression of thanks to the clergy for the unwitting aid in his deviltries; a forced retreat to a neighboring café to escape the vengeance of the crowd; a momentary furore, some discussion pro and con; and then, so far as can be learned, the world wagged on and the story ends.[1] Surely this is a remarkable instance of

[1] The account of Taxil is derived from E. P. Evans, "Survival of Mediæval Credulity," *Popular Science Monthly*, March and April, 1900.

fin-de-siècle credulity, and one that will hardly suffer by comparison with mediæval superstition. Its importance in the present connection lies in the illustration which it furnishes of what may happen in extreme cases when verifiability and scientific-mindedness are wholly ignored, and the methods that appeal to authority and to prepossessions are allowed to run riot. Then standards of probability, as well as the critical attitude, are wholly absent or hopelessly distorted, and credulity has the open door.

Prepossessions are not always so prominent in the evolution of myths that gain acceptance by preying upon credulity. The presence of an indolent atmosphere and of a sympathetic milieu is all that is necessary. Of this the story of Kaspar Hauser, the "wild boy of Nuremberg," furnishes a fairly modern instance; for the Nestors of our generation may easily remember the interest which his case aroused throughout Europe. The commonly accepted tale made him out as an abandoned child, cruelly confined in a dark cell, cut off from all association except with the monster who gave him his daily bread. He became the classic example of the condition of a human being in the absence of all education; he was heralded as a child of nature, as an example of the innocence of man before the fall, as a realization in the flesh of Rousseau's Émile. It was proposed to adopt him as the child of Europe, and he was actually adopted as a son by the Earl of Stanhope. The interest in his case was maintained by the accounts of his marvelous psychic powers, as also by the speculations as to his origin, which brought slander upon more than one noble house. He could see a gnat

in a spider's web a long distance off, and after twilight; he could distinguish between a pear and an apple and a plum tree by their odor at a distance at which others could barely see the tree; he was overcome by the exhalations of a graveyard several streets off; he could distinguish metals by their different attractions for his fingers, while the vicinity of a hardware shop brought on convulsions; when examined by a homœopathist, he proved in his own person the truth of homœopathy. His origin was a matter of eager speculation. Gossips and scholars were equally busy; and, with characteristic Teuton thoroughness, a bibliography of nearly three hundred numbers was accumulated, recounting the various versions of the story of Kaspar Hauser.

The sifted facts out of which, or in spite of which, the various myths sprouted and flourished, are few and luminous. The boy appeared on the streets of Nuremberg with a letter in his hand, which he had doubtless written, and was put in prison as a helpless wayfarer. The original protocol shows that he walked a mile on that day, recited the Lord's prayer, spoke with dialectical peculiarities, said that he had gone to school, showed his fondness for horses, and admitted that the object of the letter, addressed to a captain of cavalry, was to secure him a post in the service. He seemed to feign simple-mindedness and to avoid answering questions. In the one letter was another purporting to have been written sixteen years previously by the mother of the boy, but obviously a forgery. This started the story to which the Burgomaster gave wings by a proclamation elaborating the "wild boy of nature" theory,

and embellishing it with fantastic "details calculated to give verisimilitude to an otherwise improbable tale." Learned ignorance in the person of a Professor Daumer — to whom Kaspar was entrusted for his education — still further distorted the simple facts. Though at first the boy could not speak (this is Daumer's story) and could only understand those who treated him as an infant, this helpless and untutored babe, after three days, played on the piano, soon after knitted a stocking, and in four weeks was able to entertain the Burgomaster with an account of his years of solitary confinement. Within a month this worthy, but mentally blind, professor had transformed the wild boy into a model of social elegance, who carried on witty conversations, made graceful allusions to the ancient Romans, and played checkers and chess. The story is too full of detail to be further considered; but enough has been given to show the glaring inconsistency of the theory of explanation either with the real facts, which almost no one knew, or even with the alleged facts, which were widely circulated. Kaspar's lot simply chanced to fall in pleasant places; by accepting the part which the credulity of his surroundings thrust upon him, he was buoyed into fame and made the subject of a *neugeschichtliche Legende.*[1] It is proper to add that the backward stage of a practical psychology seventy years ago made possible the acceptance of such a caricature of an untutored child of nature. Doubtless many gave no credence to the tale; but its ready acceptance in almost all circles gives it a permanent place in the

[1] The true Kaspar Hauser is disclosed in Antonius von der Linde's *Kaspar Hauser* (2 vols., 1887).

history of credulity. In contrast with the *affaire* Taxil, the Kaspar incident appeals more to the intellectual than to the emotional weaknesses, and involves a larger share of misinterpretation of fact; while the lack of proper standards to estimate the improbability of what is given out for fact is glaringly obvious in both cases. This personal characteristic of the duped may be more forcibly described as gullibility.

To complete the collection of types of credulity, we should have an instance in which a system of interpretation of facts — not a mere narrative — in itself startling and contradictory to ordinary experience, gains widespread credence, and that in spite of pronounced inconsistency with verifiable observation and common sense. These conditions are remarkably well satisfied by the recent promulgation of the doctrines of Christian Science. Even in this field of intellectual effort, the land of the free and the home of the brave has contributed an article worthy to compete with the foreign product. Eagle-like, this system spreads its wings and soars free from the bonds of sense or earth-bound realities, free from human logic and the errors of mortal mind, free from the material impediments which nature has inconsiderately set in our paths, free to make things so by thinking them so, free to set method and learning and experience at naught. And surely it calls for courage of no common order to resist the seductive appeals of eye and ear, to sail steadily on heedless of the calls of the sirens of rationality, convinced at the outset that things cannot be as they are, and refusing the nod of recognition to the plebeian idols of the ills of flesh. It is not necessary in this connection to re-

count the beliefs of this system; it is sufficient to point out that when thousands of intelligent persons give practical adherence to, and enroll themselves under the banner of one who teaches that a bunion would be an adequate cause of insanity, if only we held the same belief about the bunion as we do about congestion of the brain; that smallpox is contagious by reason of the same agencies as make weeping or yawning contagious; that fear may be reflected in the body as fractured bones, just as shame is seen rising to the cheek; that anatomy and physiology and hygiene are the husbandmen of sickness and disease, while the reading of a textbook of Christian Science is equally effective in producing health; that when a healthy horse takes cold without his blanket, it is on account of the poor creature's knowledge of physiology — then such persons can hardly complain if they are cited as instances of modern credulity.

IV

Such, then, is the background against which logical belief shines forth with contrasted splendor; such are, admittedly in their extreme form, the results of following after strange gods and deserting the narrow path of strenuous rationality, of critically trained judgment, of adherence to verifiable standards of belief. The tale needs no adornment, and the moral is sufficiently pointed to require no hard blows to drive it home. It will be profitable in continuation to survey, though perforce briefly, the middle distance, the practical field of compromise and of the necessity for action, in which we needs must travel up hill and down dale and cannot

take the level road which we wish were possible; in which we must risk error constantly if we would move at all.

In entering the practical arena that philosopher is indeed insensitive or unobservant who does not become conscious of a decided climatic change. He is presumably familiar with various uncomplimentary remarks concerning his unfitness to assume a due share of the responsibilities of life, from the tribute of Frederick the Great ("If," he said, "I wanted to ruin one of my provinces, I would make over its government to the philosophers") to the fashionable gibes against the scholar in politics for the professor in practical affairs. There is certainly much exaggeration in the current notions of the incompatibility of the reflective and the directive (perhaps it would be unwise to say the active) temperament; and there is much reason for the claim that the science-moulded philosopher may say, "*Nous avons changés tout cela.*" Indeed, a recent writer has forcibly maintained that the nearest analogue of the man of science is the "so-called man of business, and the chief distinction between the two is that the one deals with the unfamiliar, the other with familiar things." [1] This significant difference was long ago presented by De Morgan as one of the advantages that a logical training secures. "I maintain that logic tends to make the power of reason over the unusual and the unfamiliar more nearly equal to the power over the usual and familiar than it would otherwise be. The second is increased; but the first is almost created." This is but one of the differences in training, interest,

[1] F. W. Clarke, *Popular Science Monthly*, February, 1900.

thought-habit, and temperament that estrange the scholar from the man of affairs. Yet much of this unfamiliarity is a matter of technique, and as such belongs equally to the arts of life and to the sciences; the ignorance of one another's techniques is no cause for lack of sympathy and comprehension of the aims and efforts of practical and scientific specialists. A further contrast is emphasized by philosophical historians. "In practical life the wisest and soundest men avoid speculation and insure success because, by limiting their range, they increase the tenacity by which they grasp events; while in speculative life the course is exactly the reverse, since in that department the greater the range, the greater the command, and the object of the philosopher is to have as large a generalization as possible" — this is Buckle's formulation. "Nothing can be more fatal in politics than a preponderance of the philosophical, or in philosophy than a preponderance of the political, spirit," says Lecky. Fiske, in commenting upon the relations of Huxley and Gladstone (whom Huxley himself spoke of as a "copious shuffler"), says: "One could no more expect a prime minister, as such, to understand Huxley's attitude in presence of a scientific problem, than a deaf-mute to comprehend a symphony of Beethoven."

And yet these occupations are not mutually exclusive; philosophy and politics are not December and May, and the temperate zone, in which (in theory, at least) we pass our existence, is a composite of the two. Indeed, a divorce of theory and practice is disastrous to both parties of the alliance; theory is the more real and vital for its consideration of and adaptation to

tangible conditions; and practice is more rational and more liberal, embraces a larger expediency than if responsive only to the *status quo*. Learning dissociated from doing is threatened with the decadence of mere erudition, pedantry, and disputation. Exercise is equally good for mind and body; but there is danger of falling in love with the mere mechanism of thought — the absorption in the feeling of one's mental muscles contracting and of plodding in treadmill routine, ever moving, but never advancing. The danger of practice dissociated from principle is that of becoming time-serving, narrow, partisan, short-sighted; it tacks for every wind, loses its bearings, and sacrifices larger for smaller gains. Emerson said of the English some fifty years ago, "They are impious in their skepticism of a theory, but kiss the dust before a fact"; and Emerson's own countrymen are curiously like and curiously unlike the people whose traits he characterizes. Lord Morley deplores the same tendency from a more modern point of view. He notes the inclination to reply to an advocate of improvement by "some sagacious silliness about recognizing the limits of the practical in politics, and seeing the necessity of adapting theories to facts. As if the fact of taking a broader and wiser view than the common crowd disqualifies a man from knowing what the view of the common crowd happens to be, and from estimating it at the proper value for practical purposes." These various opinions, when judiciously strained, leave a weighty deposit of truth; and they have a direct bearing upon the issues of right and wrong belief. They make it abundantly clear that the relations of right knowing to right doing as ur-

gently demand illumination to-day as when Socrates perplexed the Athenian youth by maintaining that no man would willingly do wrong or wittingly hold to error. On the one hand, we are told that for wild speculation and rash credulity, the practical man takes the lead, whether it be by subscribing in coin to schemes for extracting gold from sea-water, or "backing" the rain-makers, or the "Keeley motor"; or in subscribing in faith to the reality of curative mental vibrations, the accounts of signaling with the inhabitants of Mars, the evolution of gray matter in Helen Keller's fingertips, or any other of the items of the progress of science with which newspaper paragraphers regale their readers when copy is scarce. On the other hand, the men of books and apparatus are charged with the pursuit of fads, of a contempt for journals and ledgers, of an ignorance of business ways, and an incapacity to deal executively with men and things. The truth is that there are all shades and grades of men in both careers. The important things to be observed are tendencies and their causes, not individuals and their peculiarities. It is these tendencies that are reflected in opinion and conduct indirectly, and directly in the relations of theory to practice, as acted upon or considered.

This relation — between the theoretical and the practical factors in the progress of knowledge — may be pictured as similar to that pertaining between master and dog. The dog runs ahead of the master, takes short excursions on his own account, comes to a turn of the road and wanders hesitatingly about until he detects the direction in which his master turns; then

dashes confidently onward with an air of having intended to go that way all along, and probably imagines — and the appearances are in his favor — that he is leading the man. Yet the wise dog does not wander far out of scenting distance, is on the alert for the call of the master, and quickly retraces his steps when he finds that his master has turned the other way. It is doubtless true that the dog may light upon valuable discoveries; and the master will do well to heed any unusual signs of alarm or excitement on the part of his keen-scented companion; and if it happens that the shades of night close in upon him or that his own sight grows dim, he that walks in darkness is fortunate in having so trustworthy a guide. From which we may learn that the formation of belief in practical affairs, while seemingly independent of theory and indeed running ahead of theory for short stretches in a restless striving to enrich experience, is none the less directed by theory, and prospers best when following, though with judgment and self-reliance, the indications of principles and formulæ.

The mutual recognition of the functions of theorist and practitioner is one of the desired and not improbable consummations of modern civilization, and upon it depends in considerable measure the practical fate of right and wrong beliefs. It is still pertinent to repeat Buckle's complaint that "a theorist is actually a term of reproach instead of being, as it ought to be, a term of honor; for to theorize is the highest function of genius, and the greatest philosophers must always be the greatest theorists"; yet, in so doing, we may add the condition that the philosophers shall theorize

wisely and with appreciation of the actualities of existence, not dogmatically or capriciously. In brief, there is scientific theorizing, as there is scientific practice; belief and credulity, truth and error, economy and waste, profit and loss, are possible in each. Yet in the end, rational progress in belief and practice, though truly a question of proportion, must take its illumination not diffusely from countless scattered sources, but directly from a central luminous principle. "The devotion to the practical aspect of truth" — to cite again from Lord Morley — "is in such excess as to make people habitually deny that it can be worth while to formulate an opinion, when it happens at the moment to be incapable of realization for the reason that there is no direct prospect of inducing a sufficient number of persons to share it." "As if the mere possibility of the view being a right one did not obviously entitle it to a discussion." "The evil . . . comes of not seeing the great truth that it is worth while to take pains to find out the best way of doing a given task, even if you have strong grounds for suspecting that it will ultimately be done in a worse way." "It makes all the difference in the world," says Whately, "whether we put Truth in the first place or in the second place." Lord Morley thus protests against what he calls the House of Commons view of life, which subordinates principle to expediency, — which may be unfortunate, but necessary, — but in so doing sacrifices the paramount significance of principle, — which is both unnecessary and pernicious.

The practical arena wherein truth and error, right and wrong, the better and the worse cause, principle

and expediency, are engaged in combat is obviously too complex to admit of ready description or analysis; the few groups of combating influences that have been brought within the field of view occupy but a modest corner of the arena. Other equally important contests are going on at the same time; the ethical aspects of belief are nearly as complex as the intellectual, and as worthy of consideration; and people still find an interest in discussing how far truth should be disseminated when it undermines traditional convictions seemingly essential to happiness or even to virtue; how far, in Clifford's words, "Truth is a thing to be shouted from the housetops, not to be whispered over rosewater after dinner, when the ladies are gone away," and how far the dissemination of right belief is itself controlled by considerations of practical as well as of theoretical morality. Philosophers of so opposite a calling as a Harvard psychologist and a Parliamentary leader [1] unite in telling us that, in the last analysis, with regard to disputed questions of a not too practical sort, men do and have a right to believe, at their own risk, that which seems to them most elevating, fitting, satisfying, and rational; that in this process we all follow custom and temperamental impulse, though we cover our retreat with arguments. These enticing ramifications of the central problem of right and wrong belief, however germane to the comprehension of the forces that make for truth and error, require independent consideration. The issues in which these various factors — and especially the aspects just presented of the relations of theory to practice — culminate is that

[1] James, *The Will to Believe;* Balfour, *The Foundations of Belief.*

of the formation of belief-standards. It is in the common possession of these that the logical man of theory and the logical man of practice should find their sympathetic companionship; and to the appreciation of this underlying requisite for harmonious and profitable intercourse, nothing will contribute more directly and effectively than a comprehension of the relations that do and should exist between the guiding principles of belief and their wise embodiment in conduct. If the leaders of men, leaders of small companies and of large ones, those who are listened to and likewise listen to others, can be induced to absorb somewhat of the spirit and the sensitiveness to real distinctions that result from the successful devotion to the aims of science, the danger of the ready acceptance of false beliefs, the fostering of credulity, would be materially lessened.

In an age when many marvelous things have been accomplished, some of them on the surface as unexpected and as unconnected with other knowledge, indeed as seemingly contradictory of such knowledge, as the ostensible miracles and startling paradoxes that are paraded as demonstrable truth, it is natural enough that the man in the street should be bewildered and not know what to believe nor whom to believe. Between the Scylla of ignorant and obstinate skepticism and the Charybdis of ignorant and rash credulity, the channel seems perplexingly narrow; nor is it always possible to assume the expertness and disinterestedness of those who offer themselves as pilots. The possibility of seeing one's bones through the skin seems as remote as the possibility of perpetual motion; telepathy no more wonderful than wireless telegraphy; the predic-

tions of the astrological almanac as credible as the determination by the spectroscope of the physical conditions of other planets; the phrenological faculties as satisfying as the results of the physiological study of brain-localizations; the mental vibrations of the "absent treatment" healer as fairly supported by the results as the therapeutic action of drugs; the presentation of the mathematical triturations and the homœopathic potencies as learned and convincing as the enigmatic formulæ and manipulations of the chemist. And yet these resemblances are quite superficial, the analogies of their likeness quite misleading. On the one shore lies the orderly kingdom of rational belief; across the border the chaotic realm of credulity.

Any one who cares to take the trouble of examining the literature of the propaganda of logical unorthodoxy can readily satisfy himself of the reality and the character of the realm over which credulity holds sway. He will observe the truly unbalanced, the "cranks," those possessed with what has been described as the "unconquerable determination of the human race to believe what it knows is not so," the innocently and naïvely deluded, the faddists and extremists, the seemingly normal and wholly intelligent. The shades and grades of believers are as pronounced as on the other shore. And yet to the man of sturdy intellectual virtue these distorted though not wholly valueless beliefs offer no temptation. And equally true is it that the logically moulded thinker knows that it is useless to demand any ready-made prescription which shall save all men from credulity, not only in extreme cases — which most people do not really fear — but in the

intermediate and more frequent and actual perplexities of the practical life.

The nature of the antidote which is most worth the seeking it has been the purpose of this study to set forth. And last as first should it be emphasized that there is in many of the vital and typical problems of knowing and doing, an objectively best method of fixing belief to which we may reasonably approximate in practice. Neither the logical requirements of philosophical thought nor the actualities of the practical life, when rightly interpreted, appear to be seriously antagonistic to — indeed are wholly compatible with — the absorption of the principles rooted in the scientific analysis of belief. This infusion of the blood of science permeates the organic structure of the belief-attitude, and creates a sturdy affinity for right belief and a deep-seated aversion for the intellectual manners that error, attractive to credulity, is apt to bear. In truth this protecting ægis is in some measure an æsthetic trait — a certain intellectual fastidiousness which, as is also true of the ethical life, becomes a potent ally of virtue. And this logical virtue becomes recognizable in the ability to guide action and belief by reference to fundamental principles; it requires the quality of mind that easily holds the impress of an argument, whose beliefs are deep-rooted in the soil of human experience critically interpreted.

When confronted with the noisy demonstrations of some new revolutionary claimant for public favor, the well-bred mind, though plastic to worthily formative influences, is not easily disturbed in its convictions, nor readily affected by the contagion of popular approval.

Even though unable to explain fully the status of the ambitious aspirant, it does not become panic-stricken and lightly transfer its allegiance, nor madly follow a fashionable prestige, however brilliantly heralded. Rather is comfort sought in the reflection that often before have meteors flashed across the sky and disappeared, and still the stars shine fixedly. Across a gap of twenty centuries it finds the touch of nature that renders the whole world kin, and repeats approvingly the sentiment of Lucian: "To defend one's mind against these follies a man must have an adamantine faith, so that, even if he is not able to detect the precise trick by which the illusion is produced, he at any rate retains his conviction that the whole thing is a lie and an impossibility." Such a man knows full well that the baser metals cannot be converted into gold; and though at credulity's

> "booth are all things sold,
> Each ounce of dross costs its ounce of gold," —

he realizes, too, the potent reality of truth: that truth is neither a metaphysical abstraction nor a matter of taste, and least of all a matter of expediency. While judiciously responsive to the practical demands of the conditions under which belief must be wrought out and expressed, he is assured with Lowell that "compromise makes a good umbrella, but a poor roof"; while sympathetic with the more intimate discussion of the belief process, he holds clearly in mind the functional utility and categorical imperative of right belief.

III

THE WILL TO BELIEVE IN THE SUPERNATURAL

The present study aims to illustrate, in terms of a widely disseminated belief, the manner in which the inclination toward a conclusion affects the process of argument and the perspective of evidence. The influence may be coarse and obvious; it may be subtle and indirect. On the part of those subject to its sway, the influence is disavowed, often indignantly repudiated; for the analysis thus becomes vivisectional in its attack. An objective psychology must perforce overrule while yet it considers such protests.

The topic may be introduced by a personal reminiscence. Among the indiscreet memories of an uneventful curriculum of many college generations ago, one survives in fair relief — the study of Bishop Butler's "Analogy of Religion, Natural and Revealed, to the Constitution and Course of Nature" (A.D. 1736). So much of this non-elective study as reached my understanding aroused an aversion to the type of argument primarily, to the matter incidentally. Yet by the light of that benign essay I have again and again appreciated the comfort of sighting the terminus from the starting-point of a logical journey. It seems to be simpler and safer to reason or to travel when the destination is greeted, not with the uncertain scrutiny of

a stranger, but with the welcome familiarity of a friend.

I do not confuse this experience with the earlier school-boy discovery of the disappearance of mathematical entanglements by the simple device of looking up the answers in the book. The procedures that were resorted to, to bridge the gap of non-comprehension were ingenious, but not convincing. The irrelevant Q.E.D. served only to call attention to the absence of any visible harness to join horse and cart in proper relation. The adept argument, whether proceeding by analogy or otherwise, is more circumspect. It knows full well that conclusions do not travel on logical credentials alone; nor is their circulation determined by the quality of their construction. The successful argument presents the manners likely to impress the minds to which it addresses itself; it finds a sympathetic audience and displays its wares with an easy confidence in their acceptability; or if it meets with indifference or doubt, it proceeds to create an atmosphere congenial to its purposes. It uses all the arts of influence, from social prestige and æsthetic charm to flattery, and the backing of influential patrons. It distracts attention from the logical procedure, and until brought to bay never discloses its methods, never openly seeks a conversion, but insinuates its persuasions so unobtrusively that the mind addressed moves as with its own initiative, and participates in the conclusion as in an original discovery, reflecting an exceptional insight. It is into the mental reactions of the clientèle, when thus addressed, that I propose to inquire; and my interest in the theme has been continuous from

the days when the drastic encounter with Butler's "Analogy" first revealed the commanding supremacy of conclusions, and the subsidiary function of premises.

I

For many of the issues which impart to the intellectual life some of the complex and perplexing aspects of a problem-play, the function of reason, like that of the play, is not primarily to convince, but to corroborate and to console. Self-esteem and the logical proprieties require that the beliefs which have been admitted to the privileges of hearth and home shall be presented in the prevalent garb of reason. It certainly is prudent to hide their nakedness, if not their actual deformities; and well-behaved visitors are not usually unduly inquisitive. It will readily be conceded that our self-esteem, our social and personal reputation, require that we be rated as logical beings, that our views and conduct alike shall be accepted as substantially the result of pure reason. This rationality is among our choicest assets in every public declaration of our mental possessions. We confess quite as freely to a bad memory as to an illegible handwriting; but we would as soon own to being bad reasoners as to having bad taste. The actual possessor of bad taste enjoys his taste because the taste is his; he is not even ready to admit that "it is a poor thing," though he is aware that "it is his very own," and many of the ranges of belief bear a suspicious resemblance to matters of taste. What has been said of butter and boys may, with about the same wisdom, be said of arguments or

systems of beliefs: there is none so bad but that it is somebody's darling. And if William James proposes to increase the happiness of Bostonians, as well as of other equally human "men and women," by persuading them once for all to "abandon the notion of keeping up a musical self, and without shame let people hear them call a symphony a nuisance," "and thereby reap the same reward that comes with the day when we give up striving to be young or slender," is not the recipe as applicable to arguments as to symphonies? Are there not as many and equally desirable citizens vainly seeking inspiration and meaning in reasoning and evidence, when their heart's desire is an æsthetic or a dramatic satisfaction, and one that is genuine and effective? And would it not be conducive to happiness for the one to find it in "rag-time" or opera bouffe, and the other in spirit-séances and other encouragers of mysticism?

But this consummation is not to be looked for. *Homo sapiens* is too tenacious of his wisdom as embodied in beliefs, and of none more so than of the belief that his own beliefs are rationally reached and logically defensible. Doubt is an unpleasant, unstable, and irritating condition, akin to the hesitation that is fatal. It is a transitory status that must be absorbed and find relief in action or conviction. We need beliefs to guide conduct, to sustain thinking, and to restrain impulses; and we acquire them as best we may, and make them as serviceable as we can. Primitive man was and is as adept in the art as ourselves; his world is decidedly different from ours, his needs less so. It is ever matters of deep and intimate human welfare

that attract the belief-habits of mankind; and to primitive man almost all phenomena were eloquent with a personal message. He sought the aid of kindly forces and appeased hostile ones; and his beliefs, like his attitudes, were direct and genuine. Plagues and storms, comets and eclipses, were the heralds of warning or of punishment. But beliefs are yet more illuminating as forestalling the future than as reflecting the past; the prophet and the seer speak, and prove their calling by the exercise of transcendent powers.

Slowly, irregularly, and laboriously there encroaches upon this primitive, emotionally sustained system of causality a drastic, objective type of explanation, inconsiderate of the individual. Medicine comes to account for the plague, meteorology for the storms; while the very ability of the astronomer to predict the time of the eclipse and to trace the path of the comet, robs them of portentous meaning. The history of opinion teaches that before beliefs acquire citizenship in a scientific commonwealth, they develop under the protectorate of an anthropocentric régime, in which hope and fear, desire and consolation are the reigning powers; though the citadel which they occupy comes to be more and more commonly represented as fortified by the armor of logic and by its natural impregnable advantages. Before astronomy came to its own, astrology, shaping celestial "oppositions" to human ends, flourished as a living belief; until the chemist established his elements and his formulæ, the alchemist found an occupation in ministering to human ambition. So long as the laws of living matter were but vaguely surmised, it was possible for men to believe in

and seek the elixir of life and the fountain of eternal youth. These beliefs are now dead; the habit of mind that favored them is for the most part outgrown. To such extent have medicine and chemistry, astronomy and physics, physiology, and hygiene come to regulate the order of our thinking, that any relation claimed by these sciences is at once relegated to their undisputed sway. We accept the astronomer's predictions, the chemist's analysis, the physicist's experiment, the physician's diagnosis. As laymen we comprehend them so far as we may; yet our attitude is inspired by a like allegiance to the same logic that guides the expert. To such extent, at all events, has the natural trend of our beliefs been scientifically disciplined, and in such measure are our emotional leanings, so far as we still feel them, silenced by an acquired logical outlook.

Yet, for the majority of men, it remains natural that the belief-habits of an older nature, when thus suppressed or expelled, should seek refuge elsewhere — partly in unexplored frontiers and partly by setting up reservations within the ceded territory. The outgrown beliefs which, like the fancies of childhood, have been wholly laid aside, we are willing to call superstitions; but for the beliefs of no very different status that yet glow like fading embers or occasionally burst into flame when a new fagot is placed upon the ashes, we have some lingering fondness. It is difficult to select a belief of intermediate position, that is not in *rigor mortis*, but still shows a flickering vitality; for any selected belief offers but an individual range of appeal, circumstance, and composition. Phrenology, as a

fairly modern instance, may serve. There is distinct truth in the differentiation of functions in the brain and of their relation to specific areas, some general conformity of brain development to cranial contours; but the anatomy is warped, the physiology crude, and the psychology arbitrary. A re-survey of the field with finer instruments of research under a profoundly altered attitude led the way to a physiological psychology and to cautious but useful application of its teachings. This system secured a following and still survives, not by virtue of the strength of its evidence, nor by the appeal of its principles, but by the underlying interest which it furthers in the ready determination of human traits and as a means of prospecting among human careers. If, then, we ask why any one is still loyal to phrenology, we may satisfy our curiosity by assuming that some are misled by a faulty estimation of the evidence and in so far display the weakness of their logical powers; yet the majority of its adherents are plainly biased in its favor by the consolation or insight which an acceptance of its tenets promises. Since the advantages it extends are rather vague and affect only the more sedate, unemotional aspects of human fate, and since its disregard of established knowledge is rather barefaced, and since in competition with other and more striking beliefs it lacks the attractions of excitement and charm, its vitality is rather low. Yet the question, which might well serve to fill a gap in a lagging conversation, "Do you believe in phrenology?" has the precise significance which is germane to the present discussion. Logically, the question should mean, "Have you examined the data upon which the correlation of mental traits

and cranial contours is founded, and do you appreciate the measure of consistency of the phrenological hypothesis with the established findings of science?" Actually it means, "Do you find the conclusions of phrenology interesting and satisfying, and does it appeal to your quasi-dramatic notions of how things should be, and, incidentally, have you happened to meet with any confirmations of its principles?" Plainly, it is not the force of evidence, but the magnetism of conclusions, that attracts; and intense conviction, far from making keen-sighted, obscures the vision. Milder inclinations mildly distort the view, yet bring it about that some sort of view is attainable. The lukewarm leaning toward phrenology is illuminating both in resemblance and in contrast to the status of other beliefs that form the background of this survey.

There is no occasion to emphasize unduly the emotional or æsthetic factor in the determination of beliefs. No one supposes that for the larger, and indeed the lesser, concerns of the intellectual life people affect beliefs as they do fashions. No, they proceed rationally; and, according to disposition and training, they infuse into their attitudes and actions the spirit of rationality. Yet this admission, obvious and comprehensive, does not lessen the potency of the will to believe. Beliefs, not unlike fashions, are followed mildly or violently; and the lighter leanings which many confess for palmistry or telepathy are endured, possibly cherished, not embraced. Beliefs of feeble vitality survive so far as they avoid a direct clash with conduct, so far as they do not obscure the mental outlook. In gauging the intellectual caliber of our fellow-men we

lay as much stress upon why and how deeply they believe as upon what they believe. Yet we do not hesitate to attach a certain qualified rating to the adherents of this or that "ology" or "opathy," in so far as we regard such adherence to indicate obtuse logical sensibilities. We apply such judgments gingerly, and seek not to offend. No one, however astute or expert, can determine just how homœopathists are made, unless it be that, like poets, they are born. He compares A with B and with C and with D — all homœopathists through diverse combinations of evidence, argument, and circumstance — and looks for some common streak in their mentality. He may or may not find it. He supposes an underlying will to believe, responsive to some such appeal, which by some play of fortune has tipped the scale in favor of homœopathy. He does not assume a predilection to believe in homœopathy. With but slight change in the psychological formula of A, B, C, and D, and with moderately different environments and careers, A might have been an ardent adherent of regular medicine, B a passionate devotee of psychotherapy, C might have gone over wholly to "absent" treatment, while D alone would continue to feel the call of homœopathy. The most common bias seems to be a tendency to cherish personally consoling and irregular beliefs. Were this not a fairly widespread and, for a considerable group of humanity, a very deep-seated mental trait, it is difficult to understand how the great numbers of these systems thrive and leave a progeny.

II

Such is the potency of the will to believe. Unacknowledged, though operative, it gives direction and furnishes motive power to conscious beliefs; it gathers argument and evidence, seeks affinities, and makes or mars careers. In the extreme it develops a fanatic or a propagandist; ordinarily it makes alliances with common sense and some measure of scientific training, with the wholesome benefit of experience and with a reasonable regard for evidence and authority. And if this analysis assumes that the spirit of scientific verification is not developed to a commanding dominance, is there any good reason why for the majority of mankind it should be so? Lacking much incentive from within or without to wander from the beaten track, the ordinary devotee of common sense proceeds comfortably, even complacently. He trips occasionally and stubs his toe; but in the give and take of a practical world this is at once part of the discipline and part of the game. Any tendency that he may feel towards financial credulity or an uncritical confidence in human virtue is likely to be checked by costly experience. But there is no recognized clearing-house for his intellectual speculations. His investments, whether moderate or extensive, in the beliefs quoted on the belief-exchange, yield their interest in the satisfaction which they bring. He avoids, for the most part, depressed and undesirable views, and affects those which the market of the day records as steady and inclined to rise; and the demands of decent consistency are thus met. Even the academic mind, though withholding its sanction from any such logical compromise, in its confes-

sional moods acknowledges the logical imperative of the *status quo*. And to this add another consideration: every mind is composite, even a mind that has achieved a well-knit unity of personality. There are all sorts and conditions of belief-attitudes within the same mind, as inevitably as there are many minds where there are many men. We admit compatibilities and incompatibilities, sympathies and antagonisms; but these are limited alike in scope and degree. It takes a serious incompatibility of temper or a flagrant violation of logical propriety to cause a family rupture in the mental household; and concessions and makeshifts are freely advanced to maintain a conventional peace.

Many minds are broadly and others but narrowly streaked with rationality, but none are of wholly uniform texture; and the varieties of patterns and their combination which thus result add to the interest of human ideals and management, and on the whole prove adequate to current standards. There is, accordingly, hardly any combination of adherences which cannot find coherence in some minds. If we conduct our search diligently and discreetly we shall somewhere find a John Doe who is at once a Republican, a "votes-for-men" man, a Presbyterian, a vegetarian, with a leaning toward osteopathy and palmistry; while his friend, Richard Roe, proves to be a Democrat, an equal suffragist, an ex-Episcopalian become a Christian Scientist who still clings to the material reality of roast beef, and is more than half convinced of the genuineness of telepathy and spirit materializations, though he pooh-poohs the notion of "malicious animal magnetism" which forms a tenet of his sect. And the two

may have a mutual friend with whom they hold amicable intercourse, despite the fact that he is a Socialist, an ethical culturist, a Fletcherite, and a very stolid individual generally, who yet feels uneasy when seated as one of thirteen at table or when asked to float a venture on Friday, the thirteenth of the month. All these individuals and their near and remote kin are more or less logical, and in plain and familiar situations unaffected by prejudice are likely to reach reasonable positions. They may not always reason correctly or accurately, but they exercise a respectable logical attitude and intent. They may not be expertly critical, may indeed jump at conclusions, or hurdle to them; but these forms of mental agility in no way stamp them as exceptional or condemnable. In the summer of 1909 it would have been natural to find one of the above triumvirate an advocate of Cook, the other of Peary, as the true discoverer of the Pole; while by rare chance the third, through lack of interest or excessive rationality, might have had no opinion at all. The will to believe is aroused by the *malaise* of uncertainty; and it acquires a positive force and direction by sympathy of temperament, and thus makes converts through a composite rational and emotional appeal.

And for the rest, let us assume that the subjects of our logical survey are high-grade thinkers, loyal to the principles of a consistent interpretation of things as they are; let us assume that from such downward to the common-schooled, bourgeois layman, temperamentally hard-headed or the reverse, there will be found in a natural series diverse shades and grades of rationality and consistency. Within the series, the

most significant variable is the whole-mindedness of loyalty to the scientific attitude. This quality testifies to the profound and comprehensive encroachment of a scientific surveillance over the entire range of human activities and belief. Clearly, every thoughtful man of to-day regards a vast range of opinion as wholly withdrawn from the exercise of personal preference and as ruled by formulæ and demonstrations, by statistics and the laboratory. But the circle of human interests is larger than the syllogism, and cannot be described by the compass of the induction. The complexity and incalculability of our psychology, the breadth and depth of the intellectual and the emotional life, defies the most comprehensive formulæ. Yet nowhere does rationality find its occupation gone. The habit of mind which we bring to our most personal and insoluble problems is profoundly influenced by the trend and the discipline of the same principles, the same conceptions of cause and effect and of the uniformities of nature, which have inspired the contributions of pure and applied science.

To repeat: a sincere logical loyalty and a discernment subject only to the inevitable limitations of endowment and experience may be conceded. If representatives of this type of mind subscribe to a belief that heavy pieces of furniture, while ordinarily subject to commonplace laws of matter, may occasionally be moved by an occult force emanating from a spiritually empowered medium, or if they believe that premonitions and coincidences are vitally and personally significant, it seems but fair to regard such beliefs as settled upon a reservation set apart from the ordinary

habitations of their intellectual world. Possibly such openness of mind may be no more than an evidence of the estimable virtue of tolerance. The open mind is as desirable in science as the open door in commerce. But when examined closely, the mode of reception of these reserved issues suggests a backdoor traffic, which does not mingle with the stream that animates the public highways. It remains significant that the temper of the attitude and the trend of the conclusions which pervade these reserved areas will not square with the everyday regulation of affairs, nor with the underlying conceptions which make possible our theoretical and our practical outlook. It is also significant that these irregular attitudes and conclusions are applied to a limited range of phenomena, which are held together largely by their persistent appeal to the interpretation of laws and events as personally significant.

The tendency to be affected by such aspects of phenomena, the tendency to permit the growth of, or to cultivate, reserved areas in the logical garden remains a temperamental matter; and since professional men of science, in spite of well-earned reputations and notable achievements, in spite of proved ability to handle the logical tools of their science effectively, are yet not exempt from the influences of their personal composition, there need be no surprise to find men of this stamp among the adherents of the beliefs in question. It must be very definitely understood that men of science (in fair number) may be professionally critical and temperamentally credulous. What most needs emphasis is that the bias which they express grows out

of personal traits, not out of the qualities that support their technical acquisitions. The physicist who subscribes to the genuineness of "spirit-levitation," and the biologist who records the appearance of "supernumerary spectral limbs," are convinced of such phenomena, not because the one is technically conversant with the uniform behavior of inanimate matter, and the other with the limitations of organic structure, but by virtue of quite other and ordinarily suppressed factors of their psychological composition, which find no exercise in the procedures of the laboratory. The special knowledge of the physicist is hardly necessary to the discovery that auto-motor wardrobes and self-elevating parlor-tables are outlaws in the realm of gravitation; the technique of the biologist is unnecessary to the recognition that the spontaneous generation of hands and arms and their speedy absorption in the natural members is a violation of the laws of organic genesis of the most stupendously amazing proportions. The layman's appreciation of these contradictions is quite as definite as that of the professional scientist; and the predilections of the two for similar views are of a nature all compact. The common-sense specialist and the common-sense layman are in this aspect quite on a par, and stand and fall equally by a like logical virtue and like logical or psychological failings. Nine times out of ten, and oftener, it is not the physicist, but the temperamental man in the investigator, that is responsible for the extra-scientific conclusion; and hardly less often does the manner and measure of his conversion reflect far more correctly and intimately his personal psychology than his professional physics.

It is, indeed, most natural, if we concede the wide distribution of the "mental reservation" habit of mind amongst high-grade and loyal thinkers, that such phenomena should be endorsed, such hypotheses favored, by a small number of men who happen to be physicists, or chemists, or astronomers, or physiologists, or anthropologists. Parenthetically it is worth nothing that the chemist does not subscribe to a belief in alchemy, nor does the astronomer go over to astrology, nor does the physiologist guide his estimate of men by phrenological precepts, nor does the anthropologist resort in perplexing situations to charms and amulets and incantations. Let there be no confusion as to the legitimate and illegitimate bearing of professional prestige upon the status of a belief of this extra-scientific tenor. If John Doe and Richard Roe are inclined to believe in "materializations" or "telekinesis" because they learn that this and that scientific man has examined and been convinced, their inclination is warranted only in so far as it bases itself upon an ascription to the men of science of a superior equipment to decide this issue, and upon an equal assurance that the same qualities of mind are used in their professional as in their non-professional research.

III

This view is brusquely stated. Without withdrawing from any of its consequences, it should be tempered to fit more elastically the varying conditions. In spite of reserved areas of divergent beliefs, a man's mind remains a unit, though a complex one; and the faculties which he employs in his scientific work do not for-

sake him when he becomes involved in these personally centered systems. By the same token, does not an adherence to the law-defying theories of the séance-room reflect upon the soundness of his logic in his rigid specialty? The reply cannot be precise or decided, though it must not be equivocal. Consider a practical situation: an inhabitant of Wall Street keenly realizes the complexity and precariousness of his predictions, and the investments based upon them. He forms conclusions by considering as best he can the state of the market, the condition of the crops, the truth of certain rumors, the remote political situation, and the like; thus he reasons and estimates and carries on his business. But in exceptional cases, when his confidence forsakes him, he consults a fortune-teller to decide whether to throw his fate with the bulls or the bears. The factors in his nature that take him to the "medium" are precisely similar to those that bring to the same high priestess the most innocent lamb that ever nibbled at coupons. What the stock-broker discovers, or supposes, concerning the soothsayer's real methods will depend upon various circumstances, of which the chief is the shrewdness of the common-sense individual that keeps house in the same tenement of clay with the stock-broker. And whether his associates on the exchange shake their heads, and whether his clients transfer their business to other brokers, when they learn of his visits to the fortune-teller, will depend likewise upon his good luck and upon the character of the associates and the clients. And just as these situations vary, so likewise is there a difference between the stock-broker's reliance upon the clairvoyant and the physi-

cist's allegiance to materializations. All analogies are weak and partial; but the most conspicuous difference of the two cases is the least important, namely, that the man of Wall Street tries to apply his belief to actual concerns, while the physicist's belief remains theoretical. In both cases we have the employment in one field of attitudes and conceptions which have a very distinct status from those that obtain in the other. In the main, no reconciliation is possible; yet the two manage to make terms by adroitly and tactfully avoiding one another's sensibilities. But all this within limits; if the stock-broker begins to be unduly reckless, and transacts all his affairs by telepathy or premonitions, there is likely to be trouble even before his sanity is questioned. If the physicist contributes to his "Physical Journal" experiments in which his observations of Hertzian waves or radio-activity are altered to make room in his equations for spirit influence or disturbance, there can be little doubt as to his fate at the hands of his fellow-physicists. Likewise, in making allowance for the common temper of the two activities; if a physicist or a biologist or a stock-broker or a layman of any calling were to exhibit in his investigations of spirit manifestations a marked credulity, a clear detachment from the obligations of a critical logic and a prudent common sense, we could not but look askance at this exhibition, and could not but discount the rating of his ability in his special field. We should then decide that these divergent streaks were not superficial and isolated, but ran deep and broad through his mental tissue. Such judgments we cannot avoid; such considerations constantly and legitimately circulate in the

arena of opinion, and by them reputations stand and fall.

It has been implied that the investigator of the supernatural does and must keep apart his law-defying conclusions in the "spirit" realm and his law-abiding conclusions in the material realm. It has been indicated how far the usage of logical society tolerates such intellectual division, and how far such conduct may render him subject to suspicion; also the disaster that awaits him who attempts to put wholly asunder what is yet joined in natural unity. Yet justice has been done to neither aspect, neither to judicial tolerance nor to judicial rigor. Doubtless the largest tolerance would go out toward personal and private beliefs for which faith and a religious earnestness stand sponsor. If in private life a distinguished physicist were a known believer in the inspired character of Swedenborg's revelations, or if a distinguished astronomer announced himself a literal believer in the views expressed by Brigham Young, we might make what comments we chose upon this combination, but we should in no measure be called upon to examine the value of such beliefs by the same attitude and standards by which we examine the legitimacy of his physical or astronomical contributions. It is also our privilege to consider the connection between undogmatic and liberal religious views and the advances of science. We should indeed be utterly blind to the lessons of the past were we not impressed with the direct power of the larger belief-attitudes to make or mar the fortunes of science. We may, if we choose, express surprise that out of this or that intellectual environment so worthy

a scientific contribution should come; but it seems obvious that we must hold distinct the belief of Professor A in the necessity of total immersion as a procedure in baptism and his belief in the correctness of a theory of radio-activity. Neither we nor the professor cite his authority as a physicist in favor of the religious ceremony. We feel no tendency to join the Swedenborgians because this or that man of science has joined them, and we observe that the latter does not apply his physics to the questions of his faith. It is hardly necessary to add that these hypothetical cases are recorded wholly objectively and without particular reference; that very objectivity is as indispensable to the student of belief as it is to the achievement of scientific results in any field.

IV

This illustration has been added mainly to indicate that if the advocates of spontaneous "elevation" and spirit-made plaster casts and supernumerary spectral limbs were only such as assembled for the good of their souls, and invited to their meetings those to whom such beliefs brought real and reasonable consolation, and held séances to foster and give tangible reënforcement to such beliefs, they would doubtless receive such tolerant appreciation as their behavior incites. But such is exactly the reverse of the actual situation. They desire nothing more earnestly than the scientific warrant; they desire no other consideration for the reality of spectral limbs than for the verification of six toes on the human foot; they put X-rays and telekinetic, spirit-guided powers of mediums in the same

class; they hold that the communications of spirits shall be received no differently than messages by wireless telegraphy. There is no asking for quarter here, but a direct challenge, or rather a challenge modified by an appeal. The most convinced devotees of the modern supernatural do not maintain that the structure of science is all askew and its foundations tottering. They do not ask that our physical laboratories be dismantled and rearranged in accordance with the extra-physical or super-physical systems which their hypotheses involve. They are not militant, and they sincerely respect the methods and results of scientific research. They wear the same uniform, display the same equipment as do the regulars in the army of science; but the motives that arouse their patriotism and the foe which they wish to scatter give to their warfare a wholly different, a truly foreign, and often a confusing complexion. They ask: Are the boundaries of science so securely marked that there is no break or irregularity in its contours? May there not be conditions of a rare and exceptional nature that do not conflict with the solidarity of the universe for the reason that their primary allegiance is to another order of events? May it not be that interpenetrated with this world, which we know only so far as we have senses responsive to the vibrations of its contained energies, there is yet another to which we are ordinarily insensitive, but which now and then by a happy conflux of conditions suddenly rings out with a convincing resonance by virtue of a higher sympathetic vibration? Concede this to even a slight degree of possibility, and why may not the whole range of

mediumistic phenomena, to say nothing of telepathy and premonitions and apparitions and veridical coincidences, all shoot together into a sort of interstitial system that leaves the world of daily contact quite integral and consistent and yet itself holds together?

Now the point of view that entertains this comprehensive query may be squarely met; but this issue involves a very different tale, little of which is relevant here. The query is relevant, because it illustrates an important phase of the will to believe in the supernatural — the desire to bring belief into daily harmony, if that may be, to bring to occasional speaking terms, if that alone is possible, the extra-scientific realm with the accepted scientific régime, even though the latter must give way to receive the *rapprochement.* Let it be clearly understood that the point is not the strength of this and the other hypothesis or the value of the evidence in terms of demonstrable facts, but only the source of the tendencies to believe. Evidence is relevant only so far as it is the primary and actually effective source of the belief. In these issues it is maintained that evidence plays a wholly subsidiary rôle. The plot for the middle-class and the upper-class minds — fundamentally or incidentally dramatic in their requirements — proceeds upon the basis of quite a different range of motives; and the similarity of the *dénouement* must not mislead. What is true of the super-physical feats of the mediums may be accepted as sufficiently typical of the whole range of evidence. In regard to this, it seems no unpardonable inaccuracy to say that the evidence reduced to a single sentence is this: That upon such and such occasions the performances have been

satisfactorily accounted for as more or less clever utilizations of plain everyday physical forces (involving fraud on the part of the medium); and that on such and such other occasions, the particular observers have been unable to discover how what seemed to them to occur was really accomplished. In one case the detectives find a clue and disclose the *modus operandi*, let us say, of the murder or the robbery; in another case they fail. Detectives happen to be most wary of concluding that the crime could not have been committed in this way or in that, and they seem curiously disinclined to consider spirit interference and supernumerary spectral limbs; they have a prepossession in favor of theories that involve skeleton-keys and "jimmies" and accomplices. On the other hand, the sitters at a séance are quite sure that "it" could not have been fraud, that the medium could not know their private affairs, that such and such a maneuver was out of the question; hence "it" must be the work of spirits or super-physical agencies. Obviously this is, and must be, an inaccurate, shorthand transcript of the evidence; yet the evidence is referred to only to indicate in what way evidence does actually affect the belief-attitudes. It is contended that the step from fact to explanation is taken, not as a logical inference, but as a psychological inclination; and that, for purposes of such illustration, this summary of the type of reasoning is fair and typical.

V

All this is added to make room for the admission that for a very small and select group of adherents of super-

physical beliefs, who, indeed, have carefully examined the whole range of phenomena, who have curbed what prepossessions they may have, for whom the belief in the reality of the phenomena brings little consolation, even some distress — for these, the insistence of the "facts" does seriously affect and determine their conclusions. The group is small, possibly larger than one supposes; but as the terminal group in a series thus hypothetically constructed, it finds a natural place. Such men are not credulous; they are critical. They reject a large part of the evidence; but they find a kernel, which they say is wholly different in significance from the shell. Some make this nucleus a center of a system; others refrain from speculation, but insist that a common physics and a common psychology do not render a satisfactory account. Here the doctors plainly disagree; and when doctors disagree, it is not surprising to learn that they, too, express their temperamental as well as their professional inclinations. Such men must be less sensitive to the deterrent force of violent logical incompatibilities than are their stubborn colleagues who will not concede that the heavens may occasionally fall. They must be more sensitive to the conviction that grows out of personal experience, to the unpleasant bewilderment of a baffled understanding; they may be a little over-impatient of doubt and the restraint of judgment, a little more likely to give large values to the subjective, and small ones to the objective factors in the formulæ of conviction. And, by such tokens, do they not give evidence to a refined susceptibility to the will to believe?

The public is intolerant of fine distinctions; and this

attempt to be appreciative of all sorts and conditions of belief-attitudes may prove wearisome. Yet because these beliefs are alive they must be handled with the caution of the vivisector. The psychologist must not shrink from the operation, though the nerves which he exposes are those of self-esteem. Ideals determine standards, and standards determine actions. The pride of rationality need suffer no rebuff; but a rational view of our own rationality is itself a worthy ideal. Men need find no more fault with themselves for failing to disclose the procedures of mediums than for a like failure in unraveling the mysteries of the disappearing lady on the conjurer's platform. There is no element of intellectual feebleness involved in guessing how either effect is produced — and in guessing wrongly. The most expert political writers gauge the situation the day before the election and make the most confident predictions; and twenty-four hours later the prophecy proves wholly wrong, but the prophet does not remain without honor in the land. He continues as the accredited correspondent on political events. It is a consummation devoutly to be wished that any remote stigma of logical incapacity that by implication seems to be attached to the inability to divine how such and such phenomena are to be accounted for shall be speedily removed. We live very comfortably and with no loss of poise under the most imperfect explanations of many of the things of which the world is so puzzlingly full. But last as first, it is not the phenomena, but the personal hold of the theories advanced to account for them, that arouses a misproportioned and a misguided interest; and these

same theories achieve their commanding place in contemporary interest because of the unacknowledged but recognizable vitality of the will to believe in the supernatural.

A modern psychological theory restates the Aristotelian view of the value of the mental, or, more correctly, the emotional cathartic. It tells sufferers from ingrown psychic trouble, that if only they will dig deep down and bring to the surface the suppressed and ostracized parasite that is preying upon their psychic tissue, the very act of explicit confession will bring peace to their souls. May not the general recognition of the will to believe as a legitimate factor in the tenacity of beliefs bring about a more wholesome attitude toward the phenomena that keep alive the conception of the supernatural?

IV

THE CASE OF PALADINO

A PERSISTENT problem in the regulation of conduct by belief is the maintenance of right relations between theory and practice, between principles and their application, conclusions and their evidence, facts and the interpretation of facts. At times the distinction is clear or becomes so in a nearer approach; at times it is uncertain, and resists analysis. A prevalent logical fault is a certain impatience with principles and a correspondingly eager reliance upon facts. Such attitudes reflect a temperamental contrast. Those fond of handicraft have been divided temperamentally according as they find pleasure in large constructions, bold massive work, or in delicate operations and finished detail. The intellectual counterpart of this contrast is somewhat differently disposed. The hard-headed, matter-of-fact reasoner finds his convictions set by facts and is somewhat suspicious of principles, which exist for him mainly as summaries of facts. The convictions of the theoretical temperament respond sensitively to the illumination conferred by orderly principles, and accepts the fact or the "case" as a welcome but not indispensable confirmation. To minister to both interests, but particularly to the former, the following circumstantial narrative is set forth. While yet the tale, adorned or unadorned, points its moral, its main

service is to reinforce in terms of "fact" the emphasis of logical principles in reaching theories or accepting statements.

I

The case of Paladino finds its origin in interests as old and as widespread as humanity; its closest affiliation is with the time-worn, crude practices and beliefs of primitive peoples. Its survival into these science-saturated days makes it notable; and the attempt to parade in academic dress and to take a place among the accredited representatives of latter-day research is astounding, whether regarded as shrewd bravado or as a sincere propaganda, and remains so in whatever temper we review the successes and reverses of its checkered career. The woman in the case attracts attention. Though in the main a willing instrument of a movement that gets its headway from motives and interests that far transcend her personality, she cannot be dismissed as a lay figure upon which the products of an eager imagination have been skillfully draped. The *affaire* Paladino might have been the *affaire* Smith or Jones; but the combination of circumstances that gave it name and more than a local habitation is unusual in complexion, and has become international in its setting.

The notorious Eusapia of New York in the year 1910 is a surprisingly unprogressive replica of the obscure Eusapia of Naples of the period of 1890. Under the encouragement of convinced votaries, one and another phenomenon has been added to her repertoire; yet her stock in trade has undergone little alteration

beyond the artful cutting of the garment to suit the cloth — the requirements of her clientèle being sufficiently met by the standard patterns of her productions. It must be definitely and clearly grasped at the outset that *what Eusapia does* affords but the slightest clue to her fame or to the attitude of her sponsors, lay or scientific. The story will be blind and its meaning lost if thus read. The case of Eusapia, like a divorce suit or an embezzlement, gets its prestige from the standing of the parties concerned. The incidents are about as sordid, about as commonplace, and carry about the same lesson in one set of circumstances as in another. But when the proceedings move in intellectual high life, Mother Grundy, enterprising editors, and all sorts and conditions of men and women take notice. This heightened interest in the personnel of defendant, prosecution, and witnesses must not be permitted to obscure or distort in any measure the simple findings of the case, which alone form the subject-matter for the jury's consideration.

A sifting of the personal evidence in the case of Paladino discloses that Eusapia was born in 1854, of lowly origin, and was early left an orphan without relatives or resources; that her girlhood was uneventful save for the chance discovery, in a spiritualistic circle, of her powers as a medium. It appears that her début was in the form of a letter in 1888 from Professor Chiaia, of Naples, to Professor Lombroso. The latter was firmly convinced of her supernormal powers as early as 1891. In 1892 a group of men of science investigated her case in Milan, among them Professor Richet, of Paris, who, at first skeptical, later be-

came an enthusiastic convert to the "genuineness" of the manifestations. The years 1893, 1894, and 1895 brought forward new and distinguished converts, in Italy, in Russia, in France. Two English observers, Sir Oliver Lodge and F. W. H. Myers, took part in the séances held at Professor Richet's house on the Île Roubaud in 1894; through their interest Eusapia visited England in 1895, and there met her first serious reverses. Those who have subscribed to the occurrence of supernormal phenomena in her presence, through agencies inexplicable by fraud or by known physical forces, form a distinguished group; many of them have written learned articles framing elaborate theories to account for the motive forces responsible for the phenomena. Mr. Hereward Carrington has devoted a volume to her case. It is his opinion "that Eusapia is genuine; but she is, so far as I know, almost *unique*. That in her may now be said to culminate and focus the whole evidential case for the physical phenomena of spiritualism." If it could be shown that "nothing but fraud entered into the production of these phenomena, then the whole case for the physical phenomena would be ruined — utterly, irretrievably ruined."

It thus appears that, if we are to decide the case of Paladino according to the extent of the evidence,[1] the

[1] The roll of Eusapia's sponsors includes many men of scientific professions; of these the more enthusiastic show unmistakable tendencies to accept supernormal explanations. The Italians, Professors Lombroso and Morselli, and the French writers, Professor Flammarion, Colonel de Rochas, Dr. J. Maxwell, and M. de Fontenay have contributed the most elaborate and extravagant accounts. The two most important reports are those of the Institut Général Psy-

scientific as well as personal reputation of the witnesses, there can be no doubt of a verdict in her favor: that phenomena occur in her presence independently of her initiative, and indicate some unrecognized agency, presumably that of spirits. But the case does not stand alone; it is part of an historical development; it is full of psychological complications; the step from the data to the verdict is beset with subtle difficulties. The circumstances of the settings are of commanding importance in all such issues; indeed, they make the case of Paladino, make it or mar it. From Eusapia herself we obtain no aid. She permits the Eusapian facts and the Eusapian legends to take their course; she confesses to a faith in the spiritualistic interpretation, and calls upon her trance-control (one "John King" of spiritualistic origin) to stand by her. In brief she adopts the lingo of her cult and adapts her attitude to the atmosphere of her sitters. In addition she commands larger and larger compensation for her services with the extension of her fame, and yields to the importunity of interviewers to provide the reputation

chologique (Paris, 1908) and of the Society for Psychical Research (1909). The standard phenomena are signals and raps at command; table levitations; movement of objects in and from the cabinet; touches by invisible hands; the apparition of a hand above the medium's head; and a cold breeze issuing from the medium's forehead. The more unusual phenomena include the change in weight of the medium's person, and her levitation to the table; the moving of heavy bodies, and the approach of light ones in distant parts of the room; the appearance of arms, heads, and faces, often recognized; the mysterious impression of hands and faces on plaster or putty; the creation of an additional arm; the disappearance of the medium's legs, and other details too remarkable to mention. While these several documents are different in reliability, it is unnecessary to distinguish between them. An admirable brief review appeared in *Putnam's Magazine* of January, 1910, by Professor Leuba.

favorable for a remunerative specialty. Besides, she admits that she tricks if she gets a chance, and suggests that all mediums do; hence the need of control. The clue to the case lies in the close logical analysis of the situation, in the intimate study not so much of the evidence as of the conditions of men and events out of which the evidence grows. The case of Eusapia is a case for the logician, for the sturdy reasoner with common sense, fortified as well with some special knowledge of the psychology of the atmosphere in which the case moves and has its being.

It is fortunate that legal procedure has familiarized the public with the emergence of truth — that is, of substantial truth for practical purposes — from a glaring contradiction of testimony. Juries promptly learn that evidence must be weighed and not measured by its superficial area; that it may be necessary to decide upon complex probabilities which party is lying or finessing or is hopelessly incompetent, or pitiably self-deceived. Whether Eusapia is a monster or a martyr, a marvel or a mountebank, a medium of the unknown or a manipulator of the undetected, is just the kind of a verdict that our common sense is quite capable of reaching, if only we hold fast to the inalienable right to light, logic, and the pursuit of deception.

II

A helpful procedure in the case will be to call attention to Exhibit A as reported by eye-witnesses. At a séance held at a residence in New York City on April 17, 1910, there were, so far as Eusapia was concerned, the usual arrangements: the chairs of sitters about the

table, the curtained corner called the cabinet, containing the paraphernalia affected by spirits (tambourine, tabouret). The unusual arrangement was the concealment of observers beneath the chairs of the sitters within closest range of the medium's person. The detectives were smuggled to their positions under cover of a screen of the bystanders, while Eusapia's attention was engaged in the attempt to influence by her supposed supernormal power an electroscope brought to the séance to serve as a psychological decoy. They escaped under cover of the darkness at a later stage of the proceedings, wriggling their way along the floor and carrying with them a knowledge of the motive power of table levitations that should make others wiser if not happier men. To understand their testimony, the ceremonies of the table must be familiar. The decisive evidence of the belief that the medium does not move the table is that her hands and feet are controlled by the two sitters on her right and left respectively. She gives the control of her right hand to the left hand of her right sitter, and the control of her left hand to the right hand of her left sitter; the latter is the post of honor, since Eusapia is left-handed. Similarly her left foot (at the outset) is secured (?) by contact with the right foot of her left "control," and the like for the other foot.

To prove an unknown force, all that is necessary is to slip away the left foot, make the right foot serve to keep contact with one foot of each "control," and to apply said agile and versatile left member to the leg of the table. The unobserved but observing observer under the table reports that

a foot came from underneath the dress of the medium and placed the toe underneath the leg of the table of the left side of the medium, and pressing upward, gave it a little chuck into the air. Then the foot withdrew, and the leg of the table dropped suddenly to the floor. More wobbling of the table occurred. [This is done by pressure of the medium's hands.] Again the foot came from underneath the dress of the medium and placed itself underneath the leg of the table, forced the table upward from the floor about half a foot, held it there for a moment and repeated the "phenomenon." Each time after a levitation, the medium would appear to rest her left foot upon the top of the right, which remained constantly in an oblique position upon the feet of the left and right "controls." At no time did she have her left foot hampered in any way. It was constantly moving in the space about her chair; and I was lying with my face on the floor within *eight inches* of the left leg of the table; and each time that the table was lifted, whether in a partial or a complete levitation, the medium's foot was used as a propelling force upward.

Next, let it be noted that the "controls" on this occasion were well versed in the tricks of mediums and in the observation of significant details in this elusive sleight-of-hand and foot. Knowing when to expect action on the part of the released foot, the "control" cautiously probed the space with his own foot and "was unable to touch her left leg from the knee down, at the place where it should have been." The phenomena of the cabinet were similarly disclosed. The motive power proved to be partly the released foot and partly the released hand. The substitution of the right hand to do duty for both hands is effected under cover of the curtain, which is first flung over the table by the left hand: this, too, was perfectly apparent to the skilled "controls," to whom such tricks were stale and unprofitable. Her right "control" was in the favored position to detect the movements of her released left

hand during the later cabinet feats that require desperate darkness. He says: —

> She took my left hand and placed it over her right shoulder, far enough to let me feel her left shoulder-blade, where I exerted some pressure with the finger-tips. With my hand in this position it was almost impossible to know whether she were moving her left arm or not; hence I took the liberty of placing the ball of my left wrist where the tips of my fingers had been [in other words a substitution-trick of his own]; and this gave me ample opportunity to feel with my fingers thus freed, the movements of the sleeve of her left arm without her knowing it. Then it was plain that whenever the curtain was sharply "blown" forward, it was done by her throwing it forward with her left hand in a quick impulsive jerk. It was also plain that the hand we saw at the parting of the curtains was none other than hers.

These details indicate how circumstantial was the detection of the simple and tricky fraud that underlies the standard performances of Paladino; and they indicate the training and insight which the detection requires. Had this type of cross-examination been drastically administered early and often, it seems unlikely that there would have been a case of Paladino. Having thrown upon the situation these illuminating side-lights, it will hardly be necessary to rehearse the further corroboratory testimony. The performance suggested throughout that the medium worked for conditions favorable to the evasion of the control.

To fortify the conclusion, a second séance was arranged (Eusapia being ignorant of the outcome of the first) at which there were no concealed observers, and at which the usual phenomena took place so long as the "controls" exercised such lax guardianship as the amateur commands. But upon signal the control was

made real and effective; and the result was decisive. *From that moment on, nothing happened.* The medium grew excited and irritable, complained of the holding which was in reality gentle but properly directed, tried again and again to throw the observers off their guard, but all to no avail. Expert control stopped the phenomena under the precise conditions under which a half-hour before, with complacent and ordinary control, they had occurred in profusion. The "forces" required the use of Eusapia's hands and feet.

III

The case of Eusapia puzzles many a candid inquirer. If this crude deception lies at the basis of a career that had acquired a literature of its own, why had it not been discovered before? The answer is that it had, and repeatedly; the strange fact remains that those who detected Eusapia in fraud continued to believe in her genuine powers.

As early as 1893 Professor Richet, of Paris, commented on the general suspiciousness of the whole proceeding, and said, "To the extent to which the conditions were made rigid, the phenomena decreased"; and yet the same distinguished scientist attests physiological miracles in the presence of Eusapia that require larger credulity than many a sympathetic layman can command. Both Dr. Moll and Dr. Dessoir, of Berlin, detected the precise substitution-tricks that were used in New York.

The main point is cleverly to distract attention and to release one or both hands or one or both feet. This is Paladino's chief trick.

Dr. Moll records the throwing out of the curtain to cover the hand substitution; and notes that, by watching for it, he could detect the exact moment when the hand or foot was freed.

She boldly raises her left hand above her head, and this is accepted as a spirit hand. In spite of the nine-tenths darkness, I distinctly saw the movements, as she raised her arm.

In the séances in 1895 in England, Dr. Richard Hodgson repeatedly detected Eusapia in fraud, and the verdict of his committee was "systematic fraud from first to last." The temper of that day is worth recalling. Myers, though a thorough believer in supernormal phenomena, was unwilling to connect his convictions with the Eusapian phenomena. Eusapia was for seven weeks a guest in his house and gave twenty séances.

During all that time Eusapia persistently threw obstacles in the way of proper holding of the hands. She only allowed for a part of the time on each occasion the only holding of the feet which we regarded as secure, i.e., the holding by the hands of a person under the table. Moreover, she repeatedly refused any satisfactory test other than holding. Generally we endeavored to make the holding as good as she would allow us to make it; although toward the end we occasionally left her quite free to be held or to hold as she pleased; on which occasions she continued the same frauds, in a more obvious manner. The frauds were practiced both in and out of the real or alleged trance, and were so skillfully executed that the "poor woman" must have practiced them long and carefully.

Professor Sedgwick likewise discredited Eusapia. The investigations

placed beyond reasonable doubt the facts that the frauds discovered by Dr. Hodgson at Cambridge had been systemat-

ically practiced by Eusapia Paladino for years. In accordance, therefore, with our established custom, I propose to ignore her performances for the future, as I ignore those of other persons engaged in the same mischievous trade.

Professor Le Bon has presented an admirable survey of the significance of this "Renaissance of Magic" [1] in the course of which he records: —

> We saw on several occasions in quite good light a hand appear above her head; but when I had my assistant observe her shoulders illuminated from behind without her knowledge one could follow all her movements, and readily secure proof that the materializations were simply the natural hands of the medium freed from the control of her observers. As soon as Eusapia began to be suspicious, the apparitions of the hand ceased altogether and did not reappear until, yielding to the desire of some credulous friends, I consented to help them by withdrawing.

To return to the earlier attitudes (again 1895), Sir Oliver Lodge's conclusion is curious: —

> I am therefore in hopes that the present decadent state of the Neapolitan woman may be only temporary and that hereafter some competent and thoroughly prepared witness may yet bring testimony to the continued existence of a genuine abnormal power existent in her organism.

Since this decadent state persisted for another fifteen years it is idle to consider it temporary; and it seems unfortunate for the case of Paladino that the presence of competent and thoroughly prepared witnesses so regularly induces attacks of decadence.

IV

The case of Eusapia Paladino is peculiarly a case for the logician, for the incorruptible advocate of a sturdy

[1] *Revue Scientifique*, March 26 and April 2, 1910.

common sense. Thinking straight is essential to seeing straight. The evidence grows out of the attitude far more than the attitude results from the evidence; and this tenet forms the cardinal principle of any judicial review. The conditions attaching to the inquiry present our first concern. Mediums form a privileged class; they place themselves beyond the range of scientific procedure, and challenge the contempt of court. It cannot be too strongly emphasized that if those who profess to influence physical objects without contact were willing to submit to the experimental rules of the laboratory, the investigation would be a matter of minutes and not of years. The reply to impatient critics, private and editorial, who ask why the investigators do not bring the matter to an issue by introducing obviously decisive tests, is uniformly simple: They are not permitted to.

However shrewdly it is made to appear to be the contrary, the fact is that *the medium imposes the conditions* and the conduct of the performance. Like the performing conjurer, the medium yields to inquiry graciously and eagerly within the limits of the trick, but is most adroit in gliding over the critical moments at which examination would be inopportune. But the incomparably great advantage of the medium [1] is that he is posing as the minister of the unknown, not as an illusionist, and must be accorded the privileges of his

[1] A medium, recording his confessions, says: "A medium of experience can always outwit a looker-on even more than a conjurer, because a conjurer would not be allowed to play the antics which we can." A French conjurer corroborates from his side: "Mediums use tricks so coarse that no prestidigitator would dare to show them in public; so they are reserved for the scientists."

cult. Likewise he has ready excuses, which, like good intentions, are as common as paving-stones, and serve their purpose more generally in unsanctioned than in holy causes. Light diminishes the force; passing the hand between the medium and the leg of the table *at the critical time* breaks the circuit; skeptical and inquisitive observers interfere with the conditions; and as much more such explanations as the accepted cant or the clientèle will tolerate.

It is waste of time to point out the glaring inconsistency of mediums who profess and print the proofs of their performance of the most marvelous prodigies in complete light, and yet object to light as interfering with their power. These apologies are distracting; the essential fact is that the medium sets the conditions and refuses decisive tests. Mr. Carrington, — for whom Eusapia is the black swan of spiritualism, — in an earlier volume bears evidence: —

> In the first place, it must be stated that the medium never allows himself to be placed *absolutely* under control, i.e., held in various places by several sitters, at the same time, as an escape from such control would be an obvious impossibility.

And this is Mr. Carrington's advice to investigators of mediums in general: —

> Instead of binding the medium with ropes, tapes, etc., and sealing them so profusely, suggest that the medium employ, instead, a simple piece of white thread, and see how quickly your offer is rejected.

The most practical method of bringing the matter to a test seems to be to transform the issue from an investigation to a contest; for then he who offers the prize naturally determines the conditions of the award.

Sport commands greater loyalty than science. So Professor Le Bon, with the assistance of Dr. Darieux and of Prince Roland Bonaparte, arranged a prize of two thousand francs for any one who would make an object move without contact (say a light block of wood lying upon a table), but under conditions determined by a scientific commission — surely the merest child's play for Eusapia and the other "physical" mediums, in whose presence these phenomena occur so regularly that their learned sponsors have invented a term for the effect and call it "telekinesis." Professor Le Bon received several thousand letters from persons ready to admit that they exercised this power; but less than half a dozen came to learn the conditions; they all promised to compete for the prize, but none appeared. In New York an offer of one thousand or even two thousand dollars for a like proof of Eusapia's powers under simple but rigid conditions was evaded, and then declined upon the usual irrelevant grounds. It would, indeed, be tantamount to a conviction of imbecility for a physicist not to be able to determine whether an object can be moved without contact, *provided he determines the conditions of the experiment;* but between this and the issue of a challenge on the part of the medium to discover how the said medium accomplishes his alleged "telekinesis" under conditions arbitrarily set by him, there is more difference than between the equator and the pole. It is because the medium will not consent to play the game according to the rules of science that the scientist is forced — in the interests of maintaining the sanity of the community — to demean himself by meeting the medium on the latter's

ground, and outwit him or expose him as best he can. For this travesty public sentiment is responsible.

It thus appears that the reputation of Eusapia and the voluminous documents in the case, and the widespread tendency to credit her with rare powers unrecognized by contemporary science, all find their support in a single momentous circumstance: that this and that group of observers witnessing effects arranged by Eusapia were unable to account for what they saw, or that Eusapia, under these conditions, was able to bring about the phenomena without revealing her methods, whatever they might be. The evidence is essentially negative up to a certain point, which is the critical one of direct exposure; and beyond that point, the flimsy support of the supernormal hypothesis is at once laid bare.

The lesson thus enforced is a very simple one in elementary logic, within easy grasp of every one who exercises and cherishes his common sense: that the flimsiness of the support of the hypothesis should have been perfectly apparent quite independently of the covering under which it took refuge. It really *should not have required an exposure* to lay bare what should have been recognizable by the general suspiciousness of its appearance. It was public sentiment, not the needs of science, that required the exposure.

V

Since what Eusapia does affords but partial enlightenment, the further clue must be sought in the attitude of the witnesses in whose behalf the effects are produced. Professor Le Bon considers the national tem-

perament a fair index of the degree of marvel with which the Eusapian performance is reported. In England (and let us add in our own Anglo-Saxon land) there was no mystery, but plain fraud; "in France the success varied according to the *milieu* and the intellectual status of the sitters — it was considerable in polite circles and in general very limited in a scientific atmosphere"; "in Italy, the land of poets . . . effects appeared more marvelous than the magicians of legend ever achieved." It is the personal qualification of the observer that determines the quality of the performance; it is reported as marvelous or as moderately puzzling or commonplace or transparent, according to the temperament of the spectator and his susceptibility to "take stock in" strange powers that he knows not of. This is a familiar psychological principle, but one by no means obsolete. Eusapia's tricks are correspondingly time-worn, but served so long as eager or complacent witnesses were inclined to interpret their inability to discover how the effects are produced as a presumption in favor of unknown forces.

Everything depends upon the degree of caution with which the first step is taken; it is the first few hairbreadths that irrevocably determine the direction of a straight line. If you pause at the threshold long and resolutely, and refuse to be impressed with any effects, however apparently marvelous, until the fact that they are produced independently of the medium's initiative has been definitely established, your report will be brief, and, if we may judge by the past, stupid and depressing. If you are decidedly critical you may record (as some of the French observers have done) that the

phenomena are in part suggestive of fraud, in part inexplicable, but that it would be premature to regard them as supporting any super-scientific hypothesis; if you assume the typical amateur attitude, and have the usual high confidence in your powers of observation, a successful séance will leave in you a vague and mixed impression of bewilderment and paradox; if you treat the control yet more charitably and are half convinced that the effects support beliefs already cherished, distinct marvels will occur, and as your conviction grows, the medium grows in boldness, your critical faculties are dulled, and mysteries multiply. The last stage of all is that of perfect conviction due to repeated indulgence in uncritical séances, to the full-fledged devotion to irregular theories, to the abandonment of all caution, and the eager awaiting of novel miracles, determined by the ingenuity of the medium and the depth of your logical intoxication: sans sense, sans eyes, sans reason, sans everything. It is at this stage that a considerable portion of the literature of the case of Eusapia has been composed. The secret of it all is not in the performance, not in the miracle, but, as the French neatly say, in the *miraculé*, in the mental susceptibility of the subject to the marvelous.

The great bulk of such testimony is accordingly quite valueless except in illustration of the workings of the prepossessed mind. Yet it is not prejudice alone that is responsible for the fertility of the evidence. A fallacy of observation is operative. It is almost impossible to make the uninitiated realize how difficult it is to demonstrate fraud when decisive tests are barred, and how deceptive is the evasion of what appears to be a

rigid control. The average sitter, ignorant of the inadequacy of the uneducated sense of touch, replies: "I *know* that her hand was on mine all the time; I *am sure* that she could not have released her foot without my feeling it or have brought out that tabouret without my seeing it; *my* senses are not so easily duped." This overweening confidence is responsible for many a ruined mind. Professor Miller asks us to look upon Eusapia and her tribe

as the incarnation of specious evidence, a symbol of sophistry. When you go to see her, she really sees you to better purpose. When you want to "control" her — that is, make sure where her hands and feet are, — she controls you. That is, she gets you to sit in the circle at the table, touching your neighbor's hands, and thus forming what she calls "the chain." It is well called the chain, for by it the sitter is bound. By dint of "substitution" her own hand is soon free and you do not know where it is, but she knows very well that your hands are in full view on the table. You cannot be exploring in awkward places. The reason she gives for the chain is, of course, that it enables the current to flow round the circle.

Her greatest accomplishment of all is this, that she knows where every one is putting his attention. If you should look at the critical place, nothing would happen there. But she is a consummate mistress of all arts to direct your attention away from the critical place. If she wants to do something with the hands, she bids you be careful that you have good control of the feet. If she wants to slip her foot on yours so as to get the heel where the toe has been and put the toe on another foot, she will make mystic passes in the air in front of your eyes, and at each stroke of her hand, slip goes the foot — a slight motion which it is virtually certain that you will not notice. A jerk in one place covers a lesser jerk in another. She is a supreme eluder.

And the medium's table adds insult to injury. The very instrument that serves to prove the existence of

the unknown serves as a screen to render the movements of the medium secure from observation.

There is no need to draw any invidious distinction between those who are able to detect Eusapia's tricks and those who are not. It is still a cause for gratitude that the world is not so degenerate as to make a course in detective work an essential of a liberal education. What education should bring about is a saner attitude of mind that is satisfied with the disclosures rendered by the competent; and yet more, the attitude that is sufficiently impressed with the general suspiciousness of the whole affair to require but a few ounces of exposure to add to the pounds of damning circumstance. Dramatically the exposure has value in compelling attention, and this because ears have become deaf to the still, small voice of reason.

VI

There is another and larger significance of the case of Paladino. There must be some deep reason for the weak logical response to this type of issue; some real force to throw the observation out of function so seriously, and produce such widespread mental disaster. The distorting influence lies in the psychology of belief. Were there not some strong pull urging one on to the acceptance of the effects as transcending known experience, we should not be so ready to overlook or scantily attend to the requirements of the premises. It is the attraction of conclusions, often subconscious and subtle, as well as slight and seemingly feeble, that throws reasoning out of its orbit and dulls the vision. Small forces, if applied at the critical point, produce

notable disturbances, and particularly in the case of delicate instruments like the average human thinking machine. For that instrument has a most complex psychology. It is logical in part only, and often in small part, and by virtue of severe and protracted training. Men are interested in conclusions and unwittingly select and shape the evidence to support cherished beliefs; that is why, in the case of Paladino, the evidence is far more the result of the attitude, than the attitude of the evidence. The psychological is pitted against the logical make-up; and the issue is uncertain.

Belief is not a coldly objective attitude. Beliefs are cherished; they sustain life and make life worth living. Yet one cherishes also his rationality and the honor of the definition of a man as a rational animal. The educated man remains decently rational so long as there is not too strong temptation to depart from the conclusions which logic indicates. It becomes clear, when one thinks below the surface of the Paladino situation, that perhaps the largest single fact contributing to her reputation and to the excitement which her very simple and vulgar performances aroused, has been the strong inherent tendency to believe the hypothesis which she encouraged in regard to her "manifestations." It is not the plausibility of that hypothesis, but the *tendency to credit it*, that is the really efficient motive in Eusapia's favor. Hypotheses attract belief according to their power to console, to satisfy, to remove uncertainty; hypotheses are plausible according to their conformity with the established system of consistent truth, called science.

The hypothesis that some rare and unrecognized

force is responsible for the Eusapian phenomena need not be ruled out of court arbitrarily. We are far from having boxed the compass of knowledge. But when any such evidence of a new force appears, we may be certain that it will invite and meet the criteria of logic and the conditions of a fair and unreserved examination. It will not appear as a new game or as a challenge or emerge shrouded in the darkness of a curtained corner with "hands off" displayed on it in large letters. It will appear as an effect, obscure and vague possibly, but seeking definition and illumination in the same clear light of observation and experiment, avoiding arbitrary or suspicious precautions, as now pervades every laboratory experiment and conditions the success of every inquiry. By all means let us cultivate an open mind, but not one so perforated with loopholes that much that should remain out drifts in, and much that should be rigidly retained drops out. There is sanity in the perspective of exclusion and retention here as elsewhere.

If it be urged that the conditions imposed on the manifestations may be the means of their prevention, that darkness is not intended to conceal the medium's movements, but happens to be inimical to the display of his "force," the issue is again one of logical consistency. Not alone would the interference by this capricious "force," as set forth by its discoverers, make nonsense of many chapters of science, and require the abandonment of laboratory equipments as so much misguidedly accumulated junk, but the behavior of this "force" is completely consistent with the psychological interests of the medium in outwitting his vic-

tims. It is just such issues that expert and lay juries must decide. Nor may refuge be taken in the plea that one cannot disprove the existence of the rare powers. The logic of evidence places the burden of proof on those who maintain the hypothesis. One imaginative mind can propose more hypotheses than ninety-nine men can disprove. Similarly, in regard to the argument that Eusapia's recourse to cheating does not disprove the possession by her of genuine powers: were the existence of such powers made probable by other evidence, Eusapia might be dismissed. But since all the evidence is affected with the same suspicion as surrounds this case, it is flagrantly illogical, not to say foolish, to build a house on the sand in the hopes that if it stands, it will prove the sand to have been rock. To attempt to shift the burden of proof to the other side is mere jugglery and evasion. To accept it places the law-defying claimant face to face with his law-abiding rival. Does it not seem more rational and illuminating to agree with Professor Le Bon: "I believe with the mediums, that darkness is more favorable to the development of — credulity?"

VII

The concluding considerations belong to the larger interests of the public. Juries must on many issues decide by general appearances. They know that many scientific wonders have been produced in this day and generation; they know that men of science indulge in a good deal of remote speculation. They are also aware that in the history of science some fruitful trees have sprung from rejected seeds. It is natural that these

analogies of truth and error should mislead. Why should not the age that has brought forward wireless messages and X-rays have discovered as well telepathy and "telekinesis"? The one sounds as learned, and to the uninitiated is just as mysterious, as the other. Most of us must be content to go through the world pressing buttons and reasonably ignorant of the force that does the rest. But it is a logical duty, and one within reach of all, to hold rational notions of the nature of these unseen forces. Eusapia at her cabinet calling upon the dematerialized "John King" to help her lift a tabouret to the table, and the "wireless" operator on a distressed vessel signaling for aid may appear to present analogous and equally dramatic situations. The incidents may have occurred on the same night; but in units of culture they are centuries apart. And similarly of the arguments: the entire logical trend, the intellectual temper in which the man of science speculates is indefinitely removed from the mode of approach of those who fly to capricious systems based on the undetected movements of tables, or the acrobatics of cabinet properties, or the insipid drivel of materialized spirits. It is the most flagrant abuse of intellectual charity to ask, under the guise of the tolerance which science approves, that the like consideration be extended to candidates that present such different credentials, such unlike qualities in their appeal.

Public opinion is tremendously influenced by prestige. Great names properly carry great weight; but glitter also blinds. The problem is ever the same, that of drawing distinctions rightly. The argument from

prestige is within its field wholly legitimate, but is likewise subject to abuse. The pursuit of science vouches for honesty (except in rare instances); and that itself disposes to faith. But the largest factor of the suggestion of prestige is the assumption that the same qualities which have been exercised in the labors which have brought men their scientific standing, have fitted them for this particular problem and have been used in trying to trace it to its source. Now, the latter supposition is very far from true. How one will acquit himself in such an inquiry depends far more on one's personal temperament and general logical attitude in the smaller affairs of life, than on the value of one's scientific memoirs. Some scientific men happen to be peculiarly well suited for such inquiry; and many are doubtless peculiarly unsuited. Their fitness is more likely to be the outcome of other qualities than those which have contributed to their scientific expertness; and possibly those who hold back may be better suited to the task than those who seek it. Yet this consideration, important as it is, is not quite as important as the converse, which is that even the testimony of a small group of perfectly sincere, able, and well-trained observers, despite their reputation, cannot be of such supreme weight as to overturn well-established principles and particularly to overturn them on the basis of a mere negative inability on the part of these men to detect the particular *modus operandi* of some especially shrewd individual.

The objectivity of science determines that facts are true and important independently of the personality of their advocates. Science demands proof and sin-

cerity — just the same sanctions that the law or society cherishes. The scientific man gets his reputation from the confirmation of his discoveries, not the discovery from the man. It is not in the main that Eusapia is so superior in attainments to many another of her guild or is so peculiarly original; she is exceptionally fortunate. Instead of living and dying obscurely with a local reputation in her Neapolitan home, she has become an international figure through the advertisement of men of distinction, who have failed to detect her deceptions. The significant lesson of the story is the necessity of examining data objectively, of freeing them at once from the suggestion of prestige and from the prejudices of individual observers, and of realizing that scientific principles and common sense alike are more enduring and more important than the apparent exceptions thereto.

The social and moral aspects of the case of Paladino fall outside the scope of this review. The spirit of the laws and the rigor of their enforcement, the social condemnation of dubious practices, sufficiently illustrate the familiar inconsistency with which we look upon the pursuit of wealth by false pretences and shrewd deception. As a logical product, fraud is usually so sordid and so stupid that we are inclined to look upon it leniently when it is interesting; and we must remember that those who paid large sums to see Eusapia's table move, paid it by reason of their susceptibility to the psychology of the situation as above duly set forth. They could have attended quite as good a "show" for a much smaller admission fee. Public interest has put money in her purse, as it brought

reputation to her name. There may even be some compensating service performed by distinguished "fakirs" in that they stimulate dormant critical faculties. Too much intellectual security makes for a complacent and lazy confidence. The well-to-do are apt to bestow their beliefs, like their alms, indiscriminately. Even though science serves as a faithful watch-dog of our logical interests, we should be equal to a little watchfulness on our own account. Business relations and political strife keep men wide awake and bring them in direct contact and conflict with others whose motives and moves they are quite prepared to suspect; but the traffic in beliefs seems a safe speculation. The mental organism, like the bodily, seems to require occasional sources of irritation to keep it in normal condition. It may be a good thing from time to time for large groups of people to be shaken out of their lethargy and realize that their rationality is still exposed to attacks of this kind. This may be a very costly way of gaining experience, and of regulating public mental health, but when it is done on so conspicuous a scale, it is likely to be effective. Large bodies require strong doses drastically administered.

V

THE ANTECEDENTS OF THE STUDY OF CHARACTER AND TEMPERAMENT

To illustrate adequately the formation of conviction, it is desirable to include a long-range survey in which the successive phases of belief in regard to one and the same problem shall stand forth as a progression, reflecting stages of logical skill and psychological insight. To present the play of factors in their abundant fruition, the problem must concern large and deep human interests, and consequently venerable ones. These conditions are admirably met by the group of beliefs concerning human differences in terms of the relation of mental traits to their conditions in bodily structure and function. The term "character and temperament" may serve to indicate the theme; it is the antecedents of modern conceptions regarding the nature of our inherited temperamental traits and our acquired characteristics, that supply an interesting series of beliefs. These spread in time from Hippocrates to Darwin, and in scope from the diagnosis of disease through forecast of fate, to the reading of character, and detection of talents, by outward signs, up to a scientific physiological psychology. Extravagant notions, ancient superstition, fanciful mediæval systems, modern survivals and elaborations, along with the slow advances of psychology, that had to wait the

proper development of supporting sciences, all appear in the unfoldment.

Parallel with it run the successive steps in the standards of conviction. The largest contrast is that of the play of the subjective as opposed to the objective method. Notions attract by reason of their plausibility, and once adopted find ready confirmation in observations, and in turn lead to practices. Such notions and practices must not be considered too exclusively in the light of our rigid logical standards and our modern knowledge. In their day they were really plausible. True, they often wandered in a circle, touching a truth here and there, and again straying off to barren deserts of speculation: —

> "Wie von ein bösen Geist im Kreis herumgeführt
> Und ringsherum liegt schöne grüne Weide."

Confidence in a subjective plausibility characterizes the antecedents of the conceptions of human nature. The most explicit example is not ancient but modern; it is furnished by Lavater, who raised this subjective impression which countenances make upon us to the dignity of a "physiognomical sense." All this illustrates pointedly how well we may use our mental powers and remain ignorant of the true processes upon which they proceed. This circumstance establishes the need of a science of psychology as well as accounts for its difficulties. It calls attention to the fact, readily overlooked, that psychology, like all sciences, has a long history; its stages are not so distinct as those of more objective sciences, such as astronomy or physics or chemistry; they must be sought in the antecedents, the by-ways as well as highways, of ancient thought.

The stages of progression are not quite serial or regular. For the most part the notions and systems that come and go are not disproved, but outgrown. The reign of one is followed by the reign of another, sometimes of the same dynasty, sometimes of quite different ancestry. None the less they form an historical series, an evolutionary development.

Throughout the course the imperfect logic that holds the notions or the system together is quite as important as the imperfect insight into the facts and their meaning, to which it is applied. This remains the central consideration — the lesson of the story — and constitutes the value of its contribution to the history of conviction.

I

The strong practical interest in the sources and varieties of human powers, and their proper direction and training, may be utilized in behalf of the retrospective aspects of the subject. The antecedents of "character and temperament" concern in the main the story of false and ambitious leads and venturesome solutions of the sources of human nature. However completely discredited, they belong to the irrevocable stages of our intellectual heritage, and show how uncertain has been the occupation of the psychological realm. The historical connection between the antecedents and present-day views is irregular; the succession of opinion is largely by replacement and outgrowth. None the less the points of connection are frequent with the body of knowledge which we draw upon so readily for the satisfaction of our systematized and rationalized inquiries.

The popular interest in human nature is itself an expression thereof. Actions are largely regulated as well as interpreted by psychological considerations; and these turn attention to the nature of the mind. The feeling of strong impulse, the sense of conflict between emotions as also between desire and sanctioned conduct, the search for motives, as well as the shrewdness of the battle of wits, and the reading of another's intentions shape psychological insight. "Know thyself" is an ancient precept — at once a moral injunction and an invitation to psychological study. The early contributions to the field to be surveyed came from the learning aptly called "the humanities" and reflected the insight of experience, directed by an unschooled but worldly wise analytical temper. Quite as science is glorified common sense, so is literature elevated common sentiment; either may fail to rise above a suggestive type of opinion or pleasing conjecture. The delineation of character springs from the impressionistic attitude towards the products of nature and the vicissitudes of fortune. It is animated by a fundamental interest in one's kind. It trains men to be practitioners, empirics in large measure, in the arts of human intercourse, and tends to establish man as the proper study of mankind.

The distinctive service of Greek thought was to launch the permanently engaging intellectual problems; to this rule the problem of character is no exception. It presents the two tendencies — the impressionistic and the analytic — in characteristic form. Theophrastus (370–288 B.C.) is the prototype of the impressionistic delineators, yet is not without an analytic

strain. He sets forth his intentions thus: That although all Greece is of one

> clime and temperature of air, and Grecians in general bred and trained up after one fashion, should notwithstanding, in manners and behavior be so different and unlike. I therefore, O Polycles, having a long time observed the divers dispositions of men, having now lived ninety-nine (?) years, having conversed with all sorts of natures good and bad, and comparing them together: I took it my part to set down in this discourse their several fashions and manners of life. For I am of the opinion, my Polycles, that our children will prove the honester and better citizens, if we shall leave them good precedents of imitation: that of good children they may prove better men.

The "Characters" of Theophrastus form a group of sketches of human foibles, holding the mirror up to nature. They comprise the dissembler, the flatterer, the gossip, the toady, the fop, the miser, the superstitious, the mistrusting, the querulous, the bully, the coward, the stubborn, the pompous, the boor and the bore, the malaprop of either sex, the well-intentioned fool and the public-disregarding autocrat. This gallery of mental and moral shortcomings served as a model for distant ages. A group of delineations of character appeared in England in the seventeenth century; and the model was still suggestive when George Eliot chose the title for her "Impressions of Theophrastus Such." The modern delineations emphasize circumstance, the vocations and social stations, reflect a more varied, a more specialized, and a more complicated world. The "idle gallant," the "meer dull physician," the "upstart country knight," the "pot-poet," the "plodding student," the "down-right scholar," as well as the "self-conceited man," the "vulgar-spirited man," the

"too idly reserved man," and men of other dispositions are subjected to keen strictures in the "Microcosmography, or a Piece of the World Discovered in Essays and Characters," by John Earle (1628). Such portraitures of human peculiarities, gauged by their moral or social desirability as examples to be followed or avoided, form an attractive compendium for the interpretation of men and their ways. Their consideration, ranging from gossip to philosophy, supplies the common touch of nature that makes the world of every time and clime akin, and presents graphically for our psychological contemplation the outward issues of disposition as shaped by opportunity and circumstance.

II

This vein of character-mining failed to yield the native ore of disposition. The more fundamental problem was early recognized in the venerable doctrine of the temperaments as the alleged determinants of the original yet distinctive natures of men, and in the general notion that outward uncontrollable forces, such as climate, and directive ones, such as breeding and training, were responsible for the types of individuals and races — as duly indicated by Theophrastus. The doctrines of the school of Hippocrates (fifth century B.C.) formulated the Greek point of view. Its philosophical procedure followed that of Empedocles in the search for elements and in the explanation of manifold appearance as their variable combination. The elements of creation were regarded as fourfold: air, fire, earth, and water. These are distinctive by virtue of

elemental qualities: namely, dry and moist, hot and cold, heavy and light, which by combination yield the qualities of the elements: fire as hot, dry and light; water as cold, moist and heavy, and so on. The fourfold elements of the body are the *humors* or fluids: the blood, the (yellow) bile, the phlegm, and the black bile. Subjected to the play of analogy and correspondence in the speculative manner then employed, *blood* becomes related to *air*, has the quality of being *warm* and *moist;* the season which it typifies is *spring*, and its temperament is the *sanguine*. Its direct opposite is *earth*, which is *cold* and *dry*, finds its bodily correspondent in the *black bile* and its season in the *fall* of the year; its temperament is the *melancholic*. Fire as *warm* and *dry* has special relations to *summer*, is represented in the body by the *yellow bile*, and produces the fiery or *choleric* temperament; while water as *cold* and *moist* is allied to the *phlegm*, to the sluggish season of *winter*, and to the languid temperament which we still, in deference to Hippocrates, call *phlegmatic*.

These views were held as much more than speculative possibilities; they were practically applied. Diseases were regarded as defects in the composition of the humors, to be counteracted by appropriate applications of heat and cold, or of dry and moist, to restore a favorable equilibrium. Winter was held to be the dangerous season for a temperament lacking in fire; the body must not be too full of humors nor yet be too dry and sapless. The several ages of man, from childhood to senility, reflected the natural sequence of dominance of the several humors.

The doctrine of temperaments is historically impor-

tant quite beyond any illumination that it affords. It is obvious that the philosophers of the school of Hippocrates had no means of ascertaining that cheerfulness was resident in the blood, laziness in the phlegm, testiness in the yellow bile, and low-spiritedness in the black bile; nor that any such fundamental vital basis was afforded by the "humors" thus distinguished. Their habits of mind inclined them to such an opinion; and their sense of plausibility was gratified (where we see only far-fetched and irrelevant analogy) by observing the hot moist fluidity of blood and the damp cold sluggishness of phlegm. The originators of the doctrine of temperaments were empirical psychologists, who observed that differences of mental disposition, like cheerfulness and testiness, were common and conspicuous traits of men. They were also medical practitioners with a fair knowledge of the body and its ills, and recognized that mental dispositions were intimately related to bodily condition. Their philosophical temper found satisfaction in connecting these two varieties of information through the doctrine of the temperaments.

This doctrine does not stand alone as such an attempt. The "spirit" theory of disease has a like basis and purpose; it reaches from primitive medicine to Christian exorcism and beyond. The reference of epilepsy or other mental invasion to a foreign and malignant spirit is not unrelated to the notion of animal spirits coursing through the body and finding a local habitation in the ventricles of the brain. Again, the doctrine of signatures, in accordance with which red flowers were considered efficacious in the treat-

ment of blood diseases and yellow ones in the treatment of jaundice, or "heart's-ease" was prescribed for heart trouble, and walnuts for mental disorders (by virtue of the resemblance of their outer shell to the skull and of their convoluted kernels to the brain) illustrate the force of native analogy in cruder practices.

When notions of this order, instead of being carried along as the folk-lore products of primitive thought, assume a systematic form, they become more fantastic in the analogies employed as well as more remote from a corrective common sense. Astrology is the most ambitious of such efforts both in design and scope of application. The three persistent motives in this world-wide and world-old expression — a composite of primitive culture, superstitious survivals, and pseudo-scientific elaboration — seem to be the cure of disease, the reading of character, the fore-knowledge of the future; and in all, the control of fate. The motives combine. Astrology aims to determine the character as well as the careers of men, to predict their liability to disease and its issues, and to prescribe the set of disposition — making one of jovial temperament if the hour of birth showed favorable relations to Jupiter, or gloomy (saturnine) if Saturn ruled the critical moment. These and related notions and systems form a vast background of belief, continuously influencing the views of character and its sources. Whether the causes or the signs of dispositions were regarded as resident in the fluids of the body, or in the stars and planets, or in the detailed contours of the features of the face and head — as in the later physiognomy, itself a revival of classic and popular lore — or with

more modern but no less fanciful elaboration, in the "bumps" of phrenology, or again in the creases of the hand upon which palmistry specializes, there appears in all a common practical motive in the control of fate through insight or revelation, and a common quasi-logical attempt to establish its basis by reading the secret of its conditioning — the insignia of its dominion. The logic of the procedure, as judged by our standards, is of the feeblest; but these standards are the issue of many generations of experience, each critically testing the conclusions, revising and enlarging the data, of its predecessors. The stress of practice, we must bear in mind, is insistent. Men will apply what knowledge they have; they can not await its perfection. Ideals and systems support the intercourse with reality, but they also express the progress attained in reading its meaning; the ideal "has always to grow in the real, and often to seek out its bed and board there in a very sorry way" (Carlyle).

The ancient and honorable place of the doctrine of the temperaments in the evolution of psychological knowledge warrants its further consideration. Most influential were the contributions of Galen (A.D. 130–200), who developed the views of Hippocrates and whose authority dominated the medical world for centuries. The doctrine became a classical heritage through its incorporation in the Galenic system of medicine. Its survival in the transfer of Greco-Roman science and tradition across the desert of unprogressive ages, with their uncertain and irregular caravans of learning, was due largely to its association with the "humoral" theory of disease. This remained a central as well as a

controversial issue in mediæval and Renaissance medicine, and was effectively retired only by the complete transformation of physiological conceptions inaugurated by Harvey's discovery of the circulation of the blood (1628). Along with this decisive reform in knowledge and method there was established the clinical temper of the practice of medicine, which was as largely set by Sydenham (1624–89), as were the experimental standards by Harvey, as similarly the anatomical prerequisite had been supplied by Vesalius (1514–64). Cumulatively these advances served to cast off the spell of Galen and to install verification and observation in place of authority. As a herald of the new learning, the philosopher John Locke, a friend of Sydenham's, wrote: —

> You cannot imagine how a little observation, carefully made by a man not tied up to the four humors (Galen) or salt, sulphur, and mercury (Paracelsus), or to acid and alkali (Sylvius and Willis) which has of late prevailed, will carry a man in the curing of diseases, though very stubborn and dangerous; and that with very little and common things, and almost no medicine at all.

These considerations show to what extent practices kept alive systems precariously supported by principles. Symptoms such as fevers and chills, parching and perspiration, substantiated the hot and cold, the dry and moist as clinical realities. Remedies were prescribed to counteract them; diets were arranged according to degree of dryness and moisture. Even when the classic doctrines were discarded, they were replaced by others developed in like manner.[1]

[1] Medical theories and practices were reflected in popular lore. To recall the spirit of the ministrations it is sufficient to cite the vener-

It is fortunate that the older currents of thought, medical and otherwise, were summarized at the very period at which they were destined to retirement by

able Chaucerian diagnosis made by Pertelote of Chanticlere's affrighting dream. This was ascribed to

> "the grete superfluitie
> Of your reede colera, parde,
> Which causeth folk to dremen in her dremes
> Of arwes, and of fyre with reede leemes,
> . . . . . .
> Right as the humour of malencolie
> Causeth ful many a man, in sleep, to crye,
> For fere of beres, or of boles blake,
> Or elles blake develes wole him take.
> Of othere humours couthe I telle also,
> That wirken many a man in slep ful woo;
> But I wol passe as lightly as I can. . . ."

She then advises digestives and laxatives to purge him of "choler" and of "melancolie," though she bids him remember that he is "full colerick of complecciouu" and should beware of the "sonne in his ascensioun." Among the artists, Albrecht Dürer reflected the current belief that temperament was responsible for the differences of men. He urged that artists should present the features and proportions suitable to the characters of their subjects. One of his ripest productions, commonly known as "The Four Apostles," also bore the title of " The Four Temperaments," St. John representing the melancholic, St. Peter the phlegmatic, St. Paul the choleric, and St. Mark the sanguine.

The affiliation of "humors" and temperaments appears in the transferred use of the former term. The dramatic material of the age of Elizabeth, with its free emphasis of personality, was typically staged in Ben Jonson's (1574–1637) *Every Man in His Humour* and *Every Man out of His Humour*. The following is from the induction to the latter: —

"To give these ignorant well-spoken days some taste of their abuse of this word humour," the argument proceeds: —

> "Why, *humour* as 't is *ens*, we thus define it.
> To be a quality of air, or water,
> And in itself holds these two properties,
> Moisture, and fluxure: as, for demonstration,
> Pour water on this floor, 't will wet and run:
> Likewise the air, forced through a horn, or trumpet,

Harvey's fundamental discovery. Burton's "Anatomy of Melancholy" is a collection of all the mystic, fantastic, engaging, and (to our minds) incredible procedures of an ambitious science, suggestive of the waste-products of the mind. Burton anatomizes the humors, recognizing the four primary juices

> without which no living creature can be sustained; which four, though they be comprehended in the mass of the blood, yet have their several affections. . . . Blood is a hot, sweet, temperate, red humour, prepared in the meseraic veins, and made of the most temperate parts of the chylus in the liver, whose office is to nourish the whole body, to give it strength and colour, being dispersed by the veins through every part of it. And from it spirits are first begotten in the heart, which afterwards by the arteries are communicated to the other parts; —

and so on, with a like conjectural anatomy and acrobatic physiology for the other humors. Burton's appetite for the occult inevitably made him a believer in astrology. It is a fact that his horoscope is pictured on his tombstone, but it is presumably but a rumor that he assisted the fulfillment of the prediction of the time

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> Flows instantly away, and leaves behind
> A kind of dew; and hence, we do conclude,
> That whatsoe'er hath fluxure, and humidity,
> As wanting power to contain itself,
> Is humour. So in every human body,
> The choler, melancholy, phlegm, and blood,
> By reason that they flow continually
> In some one part, and are not continent,
> Receive the name of Humours. Now thus far
> It may, by metaphor, apply itself
> Unto the general disposition:
> As when some one peculiar quality
> Doth so possess a man, that it doth draw
> All his affects, his spirits and his powers,
> In their confluctions, all to run one way,
> This may be truly said to be a humour."

of his death by hanging himself. Burton's work is suggestive in view of the career of the doctrines which superseded the "temperaments" as practical exponents of character. It indicates the ready temptation for views of this nature to degenerate into vain pseudoscience, and under a common enthusiasm and prepossession to bring together in mutual tolerance diverse notions of like conjectural basis. Their common motive is a strong leaning toward the occult.

III

The parent view, that mental traits are conditioned by bodily *composition*, affiliated with views of similar ancestry, holding that the traits were revealed in bodily *signs*. Such is the principle of physiognomy, a doctrine as old as Aristotle, and older. There is the traditional story that the physiognomist Zopyrus, in reading the character of Socrates, pronounced him full of passionate tendencies, thus showing in the opinion of the disciples of Socrates, the vanity of his art. But Socrates came to his defense and confessed the reality of the impulses, which, however, he was able to resist. Aristotle's advocacy of physiognomy was not pronounced; it may have been little more than an inclination to recognize the reflection of emotion in feature, or the coördinate growth of body and mind. But the tractate on "Physiognomy" ascribed to him served as the text to the Renaissance adepts in occult lore. Thus restated, even more than in its original setting, it presents the characteristic dependence upon weak analogy in connecting specific bodily features with specific mental traits. Coarse hair, an erect body, a

strong sturdy frame, broad shoulders, a robust neck, blue eyes and dark complexion, a sharp but not large brow, were together regarded as marks of the *courageous* man, while the *timid* man showed opposite characteristics. The doctrine was reinforced by such analogies as that timid animals, like the rabbit and the deer, had soft fine hair; while the courageous ones, like the lion and the wild boar, were coarse-haired.

A mental trait may have at once a natural bodily cause and a manifest or covert sign. The "humorist" may also be a physiognomist, may both account for and read human character, may prescribe for its ailments according to the one set of influences, and advise as to course and career according to the other.

There is no more instructive instance to illustrate how the old learning was reinstated with slight alteration in precept and practice, than the career of Jerome Cardan (1501–76). Esteemed by his contemporaries, shrewd and able, he was urged in one direction by his taste for science and in another by his credulity. His autobiography reveals his analytic bent as well as his strong personality. It has been said of him that for all for which his contemporaries thought him wise, we should think him mad; and for what we think him wise, they would have thought him mad. So great was his reputation that he was invited and then inveigled to travel from Naples to Scotland to treat the Bishop of St. Andrews. The prelate's ailment had been described as a periodic asthma due to a distillation of the brain into the lungs, which left a "temperature and a condition too moist and too cold, and the flow of the humors coinciding with the conjunctions and opposi-

tions of the moon." With the characteristic prestige that results from finding others in the wrong, Cardan promptly found that the Archbishop's brain was too hot and too dry. He put his distinguished patient on a cold and humid diet to resist the attraction of the brain, yet had him sleep on a pillow of dry straw or seaweed, and had water dropped upon his shaven crown; in addition, however, he prescribed a regimen of simple food, much sleep, and cold showers. The improvement that resulted — naturally ascribed to the "humoral" procedures — added much to the glory of Cardan's reputation and the profit of his purse. This physician, learned and wise for his day, was yet the very embodiment of all things superstitious. Every trivial occurrence was an omen or potent. He cast horoscopes, wrote on all manners of cosmic influences, and espoused the rôle of a physiognomist. His distinctive contribution was an astrological physiognomy, based upon the underlying notion that the furrows or lines of the forehead *correspond* to the seven dominant celestial bodies; and that the qualities which they denoted were those connected with the powers and virtues conferred by Venus, or Jupiter, or Saturn, or Mercury, etc., in the current astrological system. Across the forehead he drew seven parallel lines, the spaces in succession dedicated to the moon and the six planets, and by the proportions and prominences of these lines he read the fortune of the subject, not hesitating in one case to predict from the grouping of these wrinkles that the owner thereof was doomed to die by hanging or drowning.

In such manner the humoral doctrine served to de-

termine the diagnosis of disposition and ailment, while from astrology and physiognomy were drawn further indications of personal character and probable fortune. Hardly less significant for the logical temper of these pre-Harveian days were the contributions of Giovanni Baptista della Porta (1538–1615). He was impressed by the comparative physiognomy sketched in the Aristotelian writings — a field in turn indicating the strong impression that the traits of animals make upon the thought-habits of primitive people; it appears in totemic practices, as well as in animal fables from Æsop to Br'er Rabbit. The notion that stubborn persons carry the outward sign of their obstinacy by having features in common with the face of a mule, or that foolish ones show a like resemblance to a sheep, impresses the modern reader as a strange joke. The analogy will barely support a pleasantry or a metaphor. We are fully conscious of the metaphor of our epithets, when we call an obstinate person mulish, or a shy one sheepish, or a man of sly ways an old fox, or speak of a social lion or a wise owl or a gay butterfly; it is significant that what was once serious logic is now playful figure of speech. It is also in accord with the principle of survivals in culture that the notions made current by generations of credulous "physiognomists" continue to be circulated in the popular manuals sold to simple folk to teach them the art of reading faces and futures.[1]

[1] Nothing less than a glance at the illustrations which the earlier physiognomists employed will convey an adequate impression of the vagaries of Porta and his kind. They show that what was once pictorial proof has become the artist's pastime. The material presented for amusement in Lear's *Nonsense Botany* or Wood's *Animal Analogues* is hardly more remote than that which served Porta as a

IV

All this would be as irrelevant retrospectively as it is to our central purpose, were it not that it indicates the presence throughout the ages of a considerable body of popular lore and systematized doctrine — both saturated with flimsy analogy and engaging prepossessions — which was available for the ambitious renaissance of the interest in character and its signs in the face, through its best known apostle, Johann Caspar Lavater (1741–1801). The contrast between Lavater and such men as Cardan and Porta is as marked as that of the spirit and scope of the scientific study of their respective times. The vagaries of the sixteenth century may have stood measurably aloof from the real, if slow and uncertain, advances in the knowledge of mind and nature then maturing; but they were not wholly remote, not wholly tangential to its orbit. This was no longer true of the eighteenth century. Lavater, despite his reputation and associations and the imposing effect of his ambitious publications, failed to affect seriously or to divert the increasing stream of scientific discovery to which the early eighteenth century gave momentum. The scientific contemporaries of Lavater judged his views as critically, appreciated their wholly subjective basis in a personal predilection

serious instrument of research. Thus, a portrait of Plato is printed side by side with that of a dog, and one of Vitellus Cæsar is paralleled by that of a stag; and in each case some of the most deserving qualities of the animal are regarded as typical of the human embodiment. Similarly distorted illustrations show human resemblances to a lion, or a bull, or a donkey, or a deer; while the picture of a girl is ungallantly made to approach the features of a pig. These and yet more capricious ventures in animal physiognomy were incorporated into later systems, often in complete ignorance of their source.

and their lack of objective warrant quite as justly as we of to-day. The contrast of attitude appears equally in the all but complete desuetude of the old persistent pseudo-sciences, astrological and others.

Lavater had nothing new to offer in principle or data or method. He was an impressionistic enthusiast, setting forth conclusions with a minimum of argument and convictions with a minimum of proof. His system was based upon subjective interpretation. His delineation of character has a direct reading of detailed mental traits by an interpretation of their equivalents or representatives in features and expression. Lavater's activities were manifold. Preacher, orator, philanthropist, political reformer, dramatist, writer of ballads, he was a conspicuous man of his times, highly regarded by his eminent contemporaries — among them Goethe, whose contribution to the "Fragments of Physiognomy" have been identified. He was quite without scientific bent or training. Yet his name was so commanding in the annals of physiognomy as to distract attention from the slightness of the foundations upon which his elaborate superstructure was raised. Indeed, the impressiveness of elaborate plates and luxurious editions, and the support of distinguished but uncritical patrons, were responsible for much of his fame. The reader who desires first-hand acquaintance with Lavater must be prepared for tedious assertion, for generalities that do not even glitter, for persistent avoidance of real issues, for the futile contention and misunderstanding of a propagandist. Of method he had little, and for the most part translated directly and by use of a dictionary of fanciful etymolo-

gies, from the language of a superficial anatomy into that of a wholly arbitrary psychology. He presented a popular, empirical grouping of feature-interpretation by virtue of a certain common-sense shrewdness, which he elevated to the dignity of a universal physiognomical sense — "those feelings which are produced at beholding certain countenances, and the conjectures concerning the qualities of the mind," which the features suggest. The extensive collection of portraits alone offset the tedium of the text. Lavater was an expert draftsman, and a diligent collector of engravings, outline drawings, and the silhouettes then in vogue. To each picture he attached a character-reading, which reflected little more than his personal impression or knowledge of the subject, to which occasionally were added special correlations of such traits as prudence, cunning, industry, caution, determination or what not, with the forehead, the eye, the nose, the mouth, the chin.

It was inevitable that the practical interest, lacking the compensations of Lavater's serious purpose, rapidly turned physiognomy into vulgar quackery. The followers of Lavater developed a craving for handy recipes by which to interpret the meaning in terms of character, of chin, forehead, eyebrows, and of the several distinctive combinations of feature, by an arbitrary or plausible system of signs. Physiognomy degenerated into a baseless and senseless empiricism. Oblique wrinkles in the forehead were held to indicate an oblique or suspicious mind; small eyebrows with long concave eyelashes were made the sign of phlegmatic melancholia; long high foreheads were advised

not to contract friendships or marriages with spherical heads. Such was the detailed but arbitrary correlation oracularly set forth with no more analysis or understanding of facial traits than of mental ones.

Lavater's work [1] supplies a convincing and not too ancient example, if such be needed, of the limitations of impressionism as a basis for the study of character and of its utter futility for the purposes of a sound psychology; and that apart from the like disqualifications resulting from an ignorance of the significance of such somatic features as those which formed the basis of the system. It shows how readily an enthusiastic but unintelligent industry may build a monumental construction upon a hollow foundation. It illustrates as well a specific psychological fallacy: that of exaggerating the significance of traits in which we have an interest. It is the general human appeal of the face and its expression and its place in human intercourse that supplies the interest so readily abused by popular

[1] A possible redeeming feature of Lavater's work is his recognition of facial expression as worthy of study; in this he followed the leadership of the artist LeBrun. Expression is much more generic and more readily interpreted than are peculiarities of feature. In such Biblical maxims as "though a wicked man constrain his countenance, the wise can distinctly discern his purpose," Lavater found a text for his exposition. Of the true meaning of expression, so far as it was possible before Darwin, he had slight understanding. His physiognomical sense conferred no physiological comprehension. Indeed, so far as he ventured into the biological territory, he reverted to the older notions, and made fish and fowl and even insects reveal their character by their effects upon the human impression. In an engraving of the heads of snakes he pointed out the reprobate qualities distinguishable in their form, the deceit of their colors, and the naturalness with which we shrink from such a countenance. The logic of physiognomy, ancient or modern, learned or ignorant, is of one kinship; it is the family associations that in time and circumstance come to be less and less respectable.

writers or commercial charlatans. It is just this realm of loose analogy and unchecked ambitious conclusions that attracts feeble minds with a taste for speculation and an inclination for the occult, the bizarre, the esoteric; such a taste, as if to appease a neglected, logical conscience, usually finds refuge in a forced semblance of verification. It is this combination of interests that supports physiognomy or phrenology, palmistry or fortune-telling, and (with an altered complexion) Christian Science or Theosophy, — in which latter examples cures or miracles instead of readings supply the realistic support.

V

The next and last stage in the antecedents of the study of character presented a new rôle, or, it may be, an old one in a new and distinctive costume. In its practical effect and later career it resembles the system of Lavater, and invited still greater popular abuse. Its founder was Dr. Franz Joseph Gall (1757–1828); and it achieved popularity under the name of "*Phrenology.*" While Lavater stood beyond the pale of the scientific activity of his day, Gall was an influential part of it. Gall's scientific service must be acknowledged, even if he be held responsible for the extravagances of phrenology. The system was extended and popularized by Dr. Johann Caspar Spurzheim (1776–1832), Gall's associate, and his successor as leader of the movement.

There are two distinct aspects to the work of Gall and Spurzheim; and it is not easy to understand or to set forth just how the connection stood in the minds

of these contributors to the anatomy and physiology of the nervous system, and advocates of the locations of elaborate mental faculties by means of cranial prominences. The two orders of contributions are difficult to reconcile either in spirit or in method. The motive of "character-reading" was operative, though restricted by scientific considerations. It was forcibly made the consummation of a system quite irrelevant to the purpose. In the end, the practical temper prevailed; and phrenology allied with physiognomy, palmistry, or other character-reading pretenses, degenerated to the woeful state of a *déclassé* pseudo-science. Its nearness to the illuminating truth served but to intensify the obscurity of its shadows. The contrast in the two spheres of the career of Gall and Spurzheim serves to explain why, as they traveled about Europe, they were by some called "a pair of vainglorious mountebanks," and by others placed with Newton and Galileo as illustrious contributors to science. Yet the fact that phrenology called larger attention to the study of character than had any other movement, gives it an important place in a retrospective view.

The impressionistic origin of his phrenological interests is thus recounted by Gall. When at school, he was struck by the fact that his schoolmates had facilities independent of instruction; that one was musical, another artistically endowed, and that this innate ability rather than application was most decisive in determining progress. He seems to have been annoyed at being surpassed by schoolmates who had a capacity for memorizing; and in an inauspicious moment he observed that these schoolmates all had promi-

nent eyes. At the university he directed his attention to students with prominent eyes, and persuaded himself that in every case such men had exceptionally good verbal memories; and thus was the fatal correlation made. Not unlike Lavater, he trusted to his "physiognomical sense" to recognize the prominences which were to find a local habitation and a name upon the phrenological chart. At church he observed the most devout of the attendants, detected what portions of the skull were well-developed in them, and discovered the organs of *veneration*. He compared the heads of murderers and found an organ of *murder*, and similarly studied the heads of thieves and located the organ of *theft*. He had organs for the preëminent quality of each of the five senses; an organ of *tune* for the musical, and one of number for the *mathematical*. He thus accumulated a group of some twenty-four organs (which Spurzheim enlarged to thirty-five or more), and in this contribution disclosed with strange unconcern at once his self-deception and the shallowness of his psychological notions.

The common assumptions of physiognomy and phrenology (as we readily detect, though not thus obvious to the minds of their defenders) are these: (1) that there are distinct mental traits, qualities or capacities, which ordinary human intercourse and observation reveal; (2) that these are caused by (or correlated with) prominent developments of parts of the brain; (3) the critical assumption (presumably least explicit of all) that we may accept as established the relation whereby the one, the bodily feature, becomes the index of the other, the mental trait. The assumed prin-

ciple of relation was plainly empirical, had no warrant in principle. The clue in all such systems was merely a sign or trade-mark displayed, in Lavater's theological view, by a beneficent Providence to indicate the virtues and vices of men. For phrenology the alleged principle was wholly different. It grew out of the subdivision of the functions of the brain. The evidence, it must be admitted, was sought by approved scientific methods. But the stupendous assumption was made that the presumption in favor of the *existence* of such specialized brain-areas included a *knowledge of their terms*, and that their nature was indicated by the specific differences in the observed traits of men; further, that such mental traits, giving rise to or conditioned by marked local development of brain-areas, could be detected in the corresponding prominences of the skull. So supremely unwarranted was this cumulative series of assumptions that the scientific knowledge and procedure associated with its alleged establishment failed to confer upon phrenology any more respectable status or accredited position than was accorded to the far more extravagant assumptions of physiognomy. Clearly, if the assumptions of phrenology held — itself an extravagant supposition — the study of character and temperament would be completely shaped by its conclusions. Since they are neither pertinent nor illuminating, physiological and psychological studies still have a message for the student of human nature.

The chief warrant for a further consideration of the position of Gall and Spurzheim is that their views came into direct contact with the advances in the knowl-

edge of the nervous system, which — as will duly appear — became the requisite for true psychological progress. The central question at issue was whether the brain functioned as a whole, or whether distinct functions could be assigned to its several parts. The former position was defended by Flourens (1794–1867), who maintained that the removal of a part of the brain of a pigeon weakened its general intelligence, but that the intact portion still exercised the complete range of brain-functions, though with diminished efficiency. Gall's position required a detailed and specialized division of function. He drew attention to the fact that the mutilated pigeon, while retaining physical sight and hearing, became mentally blind to the meaning of what it was clearly able to see, and mentally deaf to the meaning of sounds; he drew attention to the important evidence supplied by the association of mental symptoms with injury or disease of different portions of the human brain, and noted that these were very different according to the region affected. His contentions proved to be correct in fact, in interpretation, and in method. In this controversy Gall argued physiologically, not phrenologically. In another controversy the reverse was the case. Flourens restricted his conclusions of the unity of function to the cerebrum, and confirmed the experiments on pigeons which showed that the cerebellum regulated locomotion. Gall had made the cerebellum the organ of amativeness; if it regulated the love-affairs, it could not regulate the gait. He replied first physiologically, that the experiment was defective, and the motor impairment due to concomitant injury of other parts of the

brain; and then phrenologically, that if the cerebellum were the organ of locomotion, it would follow that persons with large cerebellums should be acrobats, and asked whether women (who in Gall's view possessed a small cerebellum) "walked and danced with less regularity, less art, less grace than men." Controversies of this kind were futile in view of the wholly irreconcilable positions of the advocates. In the end, the phrenological position became an obsession.

At one other point phrenology came in contact with the advances leading to modern psychology; this was in its alliance with the study of hypnotism in the career of James Braid (1795–1860). The remarkable insight of this investigator enabled him to recognize under disadvantageous conditions the true nature of this mental state as a partial disqualification of the nervous system; but it did not prevent his temporary subjection to the phrenological fallacy. He refuted the position that the hypnotic state was an histrionic deception; he demonstrated its reality, but unwittingly brought it within range of suggestion or self-deception. Later he realized the error of his earlier work; but his association with phrenology injured his reputation, and delayed the recognition of his pioneer work in a difficult field. The following suggests the course of the experiments: —

> I placed a cork endwise over the organ of veneration and bound it in this position by a bandage under the chin. The patient thus hypnotized at once assumed the attitude of adoration, arose from his seat and knelt down as if engaged in prayer. On moving the cork forward, active benevolence was manifested, and on its being pushed back veneration again manifested itself.

This observation seems the very parody of science. It illustrates that prepossession, even in men of shrewd observation and ability, is disastrous to logical integrity; and further that not until the true nature of nervous functioning was raised to a fundamental directive position in all psychological considerations, were false leads of this kind entirely discredited.

VI

In view of the fact that the vogue of phrenology in the middle of the nineteenth century represents the largest collective interest in the study of character that ever gained a temporary foothold, it seems proper to consider the nature of its pretensions and their following. Propagandists have an enviable if perilous vigor and enthusiasm — an element of reckless *abandon* not unrelated to the extravagances of mania in the exaggeration and self-deception which it entails. Lavater had the simpler problem of collecting drawings and engravings in imposing array to enforce the principles of physiognomy. Gall collected skulls and casts, and induced persons with marked mental peculiarities to have their heads shaven so that their replicas in plaster might be at his service. He asked that "every kind of genius make me heir of his head. . . . Then indeed (I will answer for it with my own) we should see in ten years a splendid edifice for which at present I only collect materials." The critical peril of false theories lies in their application. Gall's interests seem to have remained for the most part scientific and objective; but in association with Spurzheim, whose direction of the phrenological movement largely determined its

course, they took a more practical turn, and therein found their degradation. The extension of the phrenological principle to races and animals as a zoölogical problem appealed to Gall. He tells with ludicrous if pathetic simplicity of his baffling attempt to interpret the prominence of a part of the cranium which monkeys and women have in common. Finally: —

> In a favorable disposition of mind, during the delivery of one of my lectures, I was struck with the extreme love that these animals have for their offspring. Impatient of comparing immediately the crania of male animals, in my collection, with all those of females, I requested my class to leave me, and I found, in truth, that the same difference exists between the male and female of all animals, as existed between man and woman.

Thus was the cranial localization of "love of offspring" discovered.

Phrenology similarly offered the clue to racial differences: —

> The foreheads of negroes are narrow, and their musical and mathematical talents are in general very limited. The Chinese are fond of colors, and have their eyebrows much vaulted. According to Blumenbach, the heads of the Calmucks are depressed from above, but very large laterally, about the organ which gives the inclination to acquire; and this nation's propensity to steal, etc., is admitted.

It was seriously set forth that the dog, the ape, and the ox do not sing because the shape of their heads shows the absence of the faculties for music; that the thrush and the nightingale had heads with developed musical faculties, and the hawk and the owl lacked these parts; that in the male nightingale or mocking bird the head was square, angular, and more promi-

nent above the eyes, while in the female these parts were conical, thus endowing the male and not the female with the gift of song. "Observe the narrow forehead of the dog, the ape, the badger, the horse, in comparison with the square forehead of man, and you will have the solution of the problem why these animals are neither musicians, nor painters, nor mathematicians." Extravagant as this may appear to our scientifically minded generation, it yet represents the more sober conclusions of men conversant with the science of the day. In the hands of system-mongers and quacks the doctrines were carried to far more capricious conclusions.

It was the practical tendency to read character and predict capacity or even career that was responsible for the rapid deterioration of phrenology. This course was set by Spurzheim, under whose influence phrenological societies were founded in England and America, and the world deluged with books, pamphlets, manuals, lessons, exhibitions, charts, plaster-casts, institutes, parlor talks, and street demonstrations for the dissemination of character-reading by the bumps of the head — a movement the waves of which still beat feebly along the remote frontiers of intellectual venture. An excursion into these disorderly bypaths — suggestive of the slums of psychology — would yield little profit;[1] it would but indicate that slight devia-

[1] The excursion would indeed serve to justify the general conclusion that the sporadic survival or revival of such systems as physiognomy, astrology, phrenology, palmistry, fortune-telling, dream-interpretation, etc., is due not to the appeal of their evidence, but to the persistence of the attraction of the occult as well as to the promise of practical revelation. For it is characteristic that this class of

tions in principle lead to the widest divergence of result. An intellectual degradation ensues as the movement descends to lower strata, an issue not unlike the social degradation of sections of cities where questionable occupants inhabit the dwellings that sheltered the respectable citizens of other days. Though we cannot hold the founders responsible for this issue, it is yet true that they prepared the way for it by their own practices. Gall and Spurzheim conducted tours in prisons and asylums, reading from the shapes of the heads of the inmates the propensity for forgery, theft, violence, or lack of thrift which brought them to their fate. One prisoner showed the "organs of theft, murder, and benevolence all well developed, and, true to his organs, robbed an old woman and had the rope around her neck to strangle her, when his benevolence came to the surface," and prevented the fatality.

Such was the practical degeneration and such the fallacious principles by which phrenology attempted to oust physiology from its domain. At the time psychology was not sufficiently developed to assert its claim against the phrenological pretensions. Spurzheim had a stronger psychological bent than Gall, and developed an arbitrary psychology to fit the scheme.

latter-day compendium upon "character" through the reading of heads, faces, hands, etc., combines and resurrects with curious ignorance of their source, with a strange insensitiveness to their mutually contradictory positions, all the varied bypaths of obscure and discredited lore which we have cursorily surveyed. Aristotle, Porta, Cardan, Lavater, Gall, Spurzheim reappear in doctrines, without assignment of source, in support of "systems" purporting to reveal the secrets of human nature for the small consideration of the purchase of the volume. The occult — representing poverty if not misery of mind — like misery, makes strange bedfellows.

He distinguished between the emotional and the intellectual powers, dividing the former into *propensities*, which were direct impulses to action (like the desire to live, the tendency to fall in love, destructiveness) and *sentiments* which were complex human powers (like self-esteem, hope, mirthfulness, ideality); the latter were either *perceptive* (like size, tune, time), or *reflective* (like causality and comparison). This construction was distorted and confused, but yet not so strikingly divergent from other contributions as to arouse suspicion of its forced adjustment to the alleged findings. It was these latter, apparently substantiated by anatomical evidence, that kept the system alive. In the actual procedures of proof the simple psychology of self-deception was the dominant factor. Either the trait was marked and the phrenologist readily persuaded himself that the prominence — at best slight and not clearly defined — was present; or in the presence of a marked "bump," he was readily convinced that the required trait — as a rule a matter of uncertain and variable judgment — was conspicuous. As illustrating the temptation of allegiance to theory to enlist self-deception in the determination of fact, the retrospective view of the subject has permanent value. Prepossession, though unrecognized by the phrenologists, is likewise a quality of human nature, with an interesting psychology of its own.[1]

[1] It is characteristic of the wavelike oscillations of movements of this kind that in periods after the desertion of the position by the scientific world, an occasional reaction appears and gains a considerable adherence. An Ethological Society, which publishes the *Ethological Journal*, was founded in 1903 and attempts to reinstate the phrenological position, though in a wholly modified form

VII

At this juncture we turn from the antecedents to the more direct line of descent of modern psychology. The successive claimants to the domain of "character and temperament" may be said to have momentarily triumphed and passed away, without accredited issue. The new sovereignty represents a very different allegiance. It shares in the common heritage of modern science. The notable extension of knowledge through experiment is ever paralleled by a development of logical method and critical interpretation, as well as by an extension of technical resources. To this general movement psychology owes its present status, and shares in its benefits. It finds a concrete expression in the psychological laboratory, and a yet more comprehensive one in the transformation of the entire

and with an attempt at reconciliation with the established localization of function in the brain; the latter is in a legitimate sense the new and true phrenology. There is no reason, except the historical one (which, however, is adequate), for giving the term "phrenology" any less respectable status than that of "psychology" itself. It is clear that the doctrine of the localization of function in the cortex of the brain represents a chapter in the development of physiology which replaces the series of conjectural and extravagant views that belong to the antecedents of our subject. It should not be inferred that the Ethological Society is wholly devoted to this reinstatement of phrenology; it considers the entire range of topics bearing upon character and temperament, but presents a leaning toward the impressionistic and obscure interpretations. It may be added that so distinguished a contributor to the principles of modern evolution as Alfred Russel Wallace believed that the neglect of phrenology was one of the intellectual crimes of the nineteenth century, and maintained that this aspect of physiological and psychological research is central in its promise for the regulation of mental affairs in the future. The attempts to restate certain aspects of the phrenological position in modern form should be mentioned. They undertake a "Revival of Phrenology" and are represented by Hollander: *The Mental Functions of the Brain* (1901).

range of accredited problems, and the introduction of new realms of inquiry. The technical advance in the knowledge and control of physical, biological, and psychological forces characterizes the modern world of science. These divisions of intellectual enterprise, though differently directed, are mutually corroborative. They progress by the application of a common logic. *Standards of evidence*, *extension of data*, and *the basis of interpretation* develop together. Jointly they determine the spirit of modern science, from which psychology, along with the rest of the sciences, receives its directive bent and the temper of its pursuit. A coördinate factor is the dominance of an expanding practical philosophy — a worldly wisdom born of a larger experience in social, political, and economic relations. It is expressed in the standards of intercourse and living, and more particularly in the cosmopolitan outlook, reflecting the insight into the determination of events and careers as of the qualities of men shaped by and shaping them. This influence extends to literature, philosophy, and the arts of life; it provides the background against which the technical pursuits are projected, from which they emerge.

The establishment of the principles and the body of knowledge determining the present study of character and temperament is the convergent product of a complex development; it forms an integral part of the general advance for which the nineteenth century is notable. Our purpose will be served by considering broadly the contributory branches of investigation to which psychology is particularly indebted. Among these the establishment of the relation between body

and mind is clearly central. Equally fundamental is the interpretation of the vital processes and provisions through a unifying and illuminating principle. This was supplied by the master-key of evolution, and at once rationalized and vitalized the conception of origins and transformations of natural processes and products — including the manifestations and endowments of the mental nature. Interpretation became possible in a convincing language — quieting the Babel of tongues. Both of these guiding principles — the latter particularly — were revolutionary in their influence, not primarily by the new extension of knowledge and interest (which was in the main a consequence of the new insight), but by the introduction of a new interpretation. Familiar facts were given a distinctive and a richer meaning. The perspective of significance was notably altered. This momentous reconstruction of the biological realm indicates in a few words the decisive factors that made modern psychology possible. The brevity of the record should not diminish the appreciation of its vital importance.

The development of the knowledge of nervous function has a venerable history. The recognition of sensation and movement in relation to the nerves occurs sporadically and irregularly in Greek, Roman, and mediæval medicine, at times with a shrewd interpretation of symptoms. It seems never to have been made a leading principle, but was held in detachment from the general notions in terms of which conclusions were stated. Hippocrates, Galen, and their followers occasionally record observations in which a limited loss of movement (paralysis) and loss of sensation (anæs-

thesia) were referred to interference with the action of certain nerve-trunks. Such observations remained casual and incidental. The usual explanation of the bodily accompaniments of mental action were given in terms of the flow of the "vital" spirits, with the veins (supposed to contain air) as the true channels of the flow that determined sensation; while the ventricles (literally breathing-spaces — actually the channels for the cerebro-spinal fluid) were assigned the central part in the vital service. Vesalius, founder of modern anatomy, knew by experiment apparently, as well as through inference from observation, that section of the nerves abolished muscular control and that the loss of the medulla deprived an animal of sensation and movement. He contested the notion that faculties like memory could reside in such spaces as the ventricles of the brain. But such views were heretical to the scriptural authority of Galen and Hippocrates, and were timidly expressed and pursued. As a type of conception matured under philosophical pursuits critically maintained and in relation to the science of the day, may be cited the view of Descartes. He looked upon the nervous system as a mechanical automaton — somewhat after the manner of an elaborate and fantastic "playing" fountain, whose ingenious streams turned windmills and started miniature water-spouts. The nerves were conceived as tubes for the flow of "animal spirits," or of some similar agency, with the pineal gland in the center of the system as a controlling valve directing the flow — the flow according to the course resulting in one kind or another of mental process. Even Willis, despite his insight into the struc-

ture and function of the brain and the complex provisions for its circulatory system, could speak of it as an instrument which the "soul inhabits and adorns with its presence." He conceived the blood as a vital flame, through which products of combustion arose and in turn gave rise to mental processes. Each variety of physical change which the physiologists and chemists discovered in the laboratory of the body — such as distillation and absorption, or fermentation and evaporation, along with the older conception of animal spirits (the latter term used confusedly at once in a psychological and a chemical sense; hence "spirits" of ammonia, turpentine, etc.) — were in turn called upon to account for the transformations responsible for the elementary mental processes.

There is nothing notably distinctive in the successive formulations of "nervous" function from the days of Harvey, who gave the directive impetus to physiological conceptions, to those of Haller, who first applied them with marked success to develop the conception of nervous responsiveness (irritability) through specific adaptation of the organism of the stimulus. Haller was not free from the speculative vagaries of his predecessors; yet he thought of the problem of the physiological basis of mental processes consistently and clearly. His contributions so decidedly advanced the conception of nervous function that it was relatively easy to make the transition to the true interpretation given first by a group of physiologists in the early nineteenth century (Marshall Hall, Charles Bell, Majendi) and culminating in the actual measurement of the rate of nervous impulse by Helmholtz in 1850. The posi-

tion of Haller is notable not only for the general correctness of his conclusions and the experimental evidence upon which they were based, but equally because he separated so clearly what was conjectural from what was established. In a number of cases the task of his successors was merely to follow his lead and transform conjecture into proof.[1]

This account of one strand in the network of data indispensable to the establishment of a psychological point of view is presumably typical of parallel movements. It indicates how recent are the steps of direct bearing upon present-day problems, and in so far justifies the slight consideration (in the present connection) of the remoter and more fragmentary historical antecedents. The history makes it easy to understand how readily, in the absence of an accredited and es-

[1] An admirable statement of the development of knowledge of the nervous system is found in Sir Michael Foster's *Lectures on the History of Physiology* (1901), chap. x. G. Stanley Hall's "History of Reflex Action" (*American Journal of Psychology*, January, 1896) should also be consulted. Andrew D. White's *History on the Warfare of Science and Theology* (1896) provides an illuminating commentary upon the movement of thought through which the present subject reached its modern stage. Of the histories of psychology that of Dessoir (1912) contains the most distinctive appreciation of the "character and temperament" movement. Of the more recent studies the most noteworthy are: A. Levy, *Psychologie du Caractère* (1896); Malapert, *Tempérament et Caractère* (1902), *Les Éléments du Caractère* (1896); Alfred Fouillé, *Tempérament et Caractère, etc.;* Paulhan, *Les Caractères* (1894); Th. Ribery, *Essai de Classification Naturel des Caractères* (1902); L. Klages, *Prinzipien der Charakterologie* (1911); Sternberg, *Charakterologie als Wissenschaft* (1907); C. J. Whitby, *The Logic of Human Character.* Of books of other purpose with important bearing upon the subject may be mentioned MacDougall, *Social Psychology* (1908), and Wallas, *The Great Society* (1914). A notable volume is A. F. Shand, *The Foundations of Character* (1914). My own volume, *Character and Temperament* (1916), attempts a comprehensive statement in terms of modern psychology.

tablished view of the bodily correlates of mental action, the ambitious innovations as well as the traditional survivals of beliefs could gain a foothold. This is true in part of even so late a propaganda as that of Lavater — which in large measure was operative before the day of the most decisive discoveries — and to the careers of Gall and Spurzheim, whose contributions in part came after them. The spirit of nineteenth-century science was not then sufficiently disseminated to make obvious the irrelevancy of such pretensions as phrenology, nor indeed to offer a satisfactory consideration of the problems which that system professed to solve.

VIII

In the collateral ancestry of "character and temperament" the anthropological attitude occupies an important place, in a new sense making mankind the proper study of man. It forms part of the broadening outlook upon the constitution of nature in general and human nature in particular, that characterizes modern thinking. It doubtless has a relation to the closer study of the political struggles of nations and to economic expansion, though the relation is not intimate. It aims at a philosophical interpretation of the structure and motive sources of human society and institutions. The anthropological interest extends to the characteristics of the social groups, particularly of races and peoples in different stages of development and under the sway of distinctive cultures. The enlargement of outlook is a result of the spirit of exploration and inquiry, which brought knowledge of peoples and

habitations and other systems of culture, and in another direction extended the reconstruction of the past of man. A similar enterprise resurveyed the story of the intellectual past and traced the slow control of the forces of nature through invention, and the equally laborious attainment of a social control through the organizations of men. The larger intercourse with varieties of mankind; the broader interpretation of the forces responsible for human development; the technical scientific advances: these resulted from the spirit of exploration and inquiry, and brought with them a more thorough knowledge of the diversity of men and civilizations, and in the process traced the issues of the interplay of desires, capacities, and beliefs, by which to interpret one's own and (with allowance) foreign natures. Culture acquired a more real and a richer meaning as a psychological product, and therewith conferred a new insight and a new obligation upon the psychologist. The diversity of men was thus related to their divergent solutions of the problem of shaping their lives to satisfy needs, impulses, and desires; and the environment, so largely a psychological one, acquired its full significance. The study of human nature embraced more than that of one time and region and status. The still more recent and independent emphasis of the sociological aspects of life is in the larger view an issue of the anthropological interpretation, but is yet more characteristic of the attitude now dominant, and properly called modern. The psychology of the social relations is thereby made an integral part of the study of human character.

Two further aspects of the qualities of which charac-

ter and temperament form the realistic composite, are the genetic aspect, and the abnormal — the pathological aspect. The growth of traits is an essential part of their nature. It implies a reference to the setting in which they operate, to which they are adapted, by which they have been shaped. It implies equally the reference to the vital course, the maturing unfoldment of native endowment, which makes the biological aspect of human nature the most comprehensive and the most elemental. Within this compass the determination of hereditary forces and their mode of operation assumes a special importance. The traits forming the composite of "character and temperament" are part of the biological inheritance, are the issues of forces whose fundamental significance is the biological one. Accordingly (despite or in addition to our more detailed interests in other aspects) they must reflect and conserve the allegiance to this underlying relation. More specifically, the genetic aspect differentiates the outlines of the stages of growth; in its terms are described the orbit of the psychological cycle. It yields the psychology of infancy, of adolescence, of maturity, of senescence, and presents the course of the included qualities in mutual illumination. The genetic argument emphasizes a progressive environment and a progressive purpose; it enlarges the scope of adaptation, and it interprets the impetus and goal of varying interests and endeavors. It was never absent from the accredited psychology of human nature, but in the modern view it assumes an explicitness and a directive position that constitutes it a notable factor among the available resources. It has powerfully affected our

entire view of human qualities, has extended our data, and enriched their interpretation.

A parallel statement may be made of the argument from the decay, the faulty development, the inherent liability to perversion of natural qualities, which are responsible for the pathological, the abnormal, the divergent aspects thereof. Useful adaptation, due proportion, tempered blending, related emphasis of traits stand as the normal issue; the divergence or failure thereof becomes the abnormal. The abnormal in excess or defect takes its place as an instrument of analysis and an enlargement of data. It is a distinctively modern resource, particularly in the refinement of its application.[1]

It remains to touch upon the collateral streams of interest which in modern times maintain the study in one or another aspect, thus bridging the gap between the old and the new learning. Among these is the attempt, never wholly absent in practical ages, to guide training, to indicate on the basis of an analysis of char-

[1] It is in such general terms that the line of descent of the present psychological interpretation of human endowment proceeds. The more specific history of the attempts to formulate the resultant positions is brief. The classic chapter (book VII, chap. v) "Of Ethology, or the Science of the Formation of Character," in John Stuart Mill's *System of Logic* (1843), though a programme rather than a contribution, still has significance. The project was undertaken by Alexander Bain in a volume bearing the title *On the Study of Character* (1861). Though Bain wrote at a time when psychology had made rapid advances and the vagaries of phrenology had been retired to their proper place, he devoted a considerable portion of his book to a refutation of the phrenological position. He thus conferred an undeserved dignity upon these findings and gave his constructive views an unfortunate setting. The subject was independently pursued by a group of writers (mainly in France and Italy), whose contributions in part belong to the living literature of the subject.

acter the promise of youth, and the direction of vocation — all in the spirit of a worldly wisdom. As an example of the earlier period, the work of the Spaniard, Huarte (1530–92), "The Trial of Wits," may be cited, since it seems to have attained a large circulation, was translated into several languages (the English edition appearing in 1689), and the German by the great Lessing (1729–81) so late as 1752. There were other writings of similar import both before and after Huarte. It is difficult to estimate their precise influence in the current of thought destined to be redirected in a more scientific analytic interest. There is no hesitation, however, in recognizing in the works of Kant (1724–1804) a dominant influence in the rehabilitation of the subject. This appears not alone in his recognition of the claims of the practical reason, but notably in his "Anthropology" (1798). Indeed, Kant's use of this term corresponds more closely to a study of the individual differences of men — which the problems of character and temperament consider — than to the content of the science which now bears that name. Special attention should also be directed to his "Observations on the Sense of the Beautiful and Sublime," in which is given in a modern vein a detailed analysis in the field of the emotions, with excursions into the comparative psychology of the sexes and of nations. It shows the shrewd analyst in an engaging light. Of the writers affected by the Kantian position, who realized that the study of character offered a great field for the applications at once of philosophy, of anthropology, and of education, Julius Bahnsen is the most representative. His work on "Charakterologie"

(1867) both in method and scope represents the attempt to reach general and practical conclusions in the spirit of the early nineteenth century. It does not incorporate the views of the bases or sources of character which were even then available and which were represented by a group of German physiologists, such as Johannes Müller (1801–58), K. F. Burdach (1776–1847), and in a different temper Lotze and K. G. Carus. These, sympathetic with the life of the practitioner, brought to their philosophical generalizations the spirit of exact knowledge.

The establishment of modern psychology is the culmination of many interests; in no aspect is this historical development more significant than in regard to the sources of the view of the qualities of men as applied in modern life. The attempt to short-circuit the route from theory to practice, from understanding to application, has always ended disastrously. The correctness of the foundations determines the strength of the edifice. The study of the nervous system and the recognition of the subjection of all human traits to an evolutionary process laid the foundations. The sociological expressions of human qualities were related to their biological significance. The competition of human qualities received a psychological interpretation. Narrow views were avoided by considering the varieties of human culture and expression. Institutions, though dominantly an environmental product, became significant as embodiments of psychological needs and their satisfaction. Vocations became directions of special endowments. National characteristics were similarly interpreted. Education was seen

to be a transformation of original trends as well as a direct preparation for the situations of an artificial life. Human nature was at once the material upon which all desired ends had to build, while yet to be remodeled for such cherished purposes. A closer knowledge of the mode of working of the human endowment resulted from the experimental study of the underlying processes of the mind. Language, art, science, customs, social institutions, political relations, reflected the spirit of a collective mind, though often articulate through the original contributions of favored individuals. With this combined equipment the psychologist of to-day proceeds to the interpretation of the traits of men summarized in the study of character and temperament. The antecedents of this view form a notable chapter in the development of the human mind, in the story of the control of the psychic forces of which culture is a record.

VI

FACT AND FABLE IN ANIMAL PSYCHOLOGY

As an instance of a simple and clear-cut "case" in the study of conviction, the contrast of the facts and the fables in the intellectual powers ascribed to pet animals leaves nothing to be desired. The question at issue is direct and distinct. Can a dog or a horse reason in the sense of calculating, reading, and making similar logical distinctions? When an alleged educated dog or an equine genius is exhibited with elaborate demonstrations on the public stage, what shall be our attitude of belief? Once again we have to draw the line between the probable and improbable, the possible and impossible in terms of a psychological issue. Yet, so preposterous is the assumption involved in the claim, that even an elementary analysis of the psychological contradictions which it tolerates, is adequate to dispel the delusion. The will to believe in the supernormal animal may have affiliations with other "survivals" that continue to influence popular thinking through the imperfect consistency of the easy-going popular mind. Yet even fairly critical persons "take stock in" animal geniuses. In such cases, as well as in the case of the exhibitors of such animals, there may be a measure of self-deception in the process. Simple and brief though the case is, it stands clearly as a contribution to the logical conditions to which a psychological inquiry is subject.

I

Man has ever been ready to show his esteem of animal ways, even to the veneration that in early times took the form of animal worship. The cunning and courage of animals, their passions and endurance, their keenness of sense and mastery of instinct, appealed to the man of nature as enviable qualities. The wolf that he feared, or the horse that he subdued, was equally to him a fellow-being. He was aware that the animal scent was truer, the animal sense of direction surer, than his own. Matching his wits against theirs, he knew that he might be outwitted by animal wile, might be overcome by animal daring. In his mythology he constructed beings endowed with superhuman qualities by fantastic combinations of the animal and the human form; and in his fables, from Æsop to Br'er Rabbit, he gave to his favorite animal the hero's part in his simple plots. He placed himself under the protection of some sacred animal as a totem, and held it as likely that the soul of an animal could be made to inhabit the body of a man, or that by some magic he could be transformed into their semblance.

It is quite possible that some obscure and disguised variety of this same instinctive feeling may still affect our estimates of what animals do, and of how they feel and think. We know so intimately how our domestic pets enter into the routine of our lives, share our moods and occupations, that it seems plausible to suppose that only a lack of speech prevents them from expressing a knowledge of our thoughts and sympathy with our feelings. But when we reflect upon the matter more soberly, we realize that we must not allow our

prejudices to affect our judgment of what their behavior justifies us in concluding in regard to their intelligence. In considering what kinds of minds they have and how they use them, we must never forget how different are their needs from ours, how readily an action on their part may seem to be full of meaning to us (because if performed by us it would be done for definite reasons and purposes), and yet may be for them a rather simple trick to gain our favor. This, indeed, is the difficulty of the whole problem. We can judge what animals think only from what they do; yet what they really do may be wholly different from what they apparently do. It is we who unintentionally read into the action the meaning that it has for us. The way out of this difficulty is not very simple nor very direct; and it is the psychologist's business to determine by all the various kinds of evidence and reasoning that he can bring to bear upon the data, just what kinds of thinking the most favored animal can and cannot master. The latter limitation, particularly, must be carefully considered; yet, both for animal capacities and animal limitations, is it of prime importance to note that, like ourselves, animals learn only such things as enter profitably into the scheme of their lives. They will under ordinary natural circumstances acquire an intelligent appreciation of such of the goings-on in the world about them as they can put to use. Though we furnish our pets with decidedly different conditions of life and teach them much that they would have no occasion to learn for themselves, yet the manner of their learning still remains of the same order and requires the same combination of powers as governs their

natural behavior. So, in the end, the question of how animals think is one that psychology may hopefully consider. The answer may not be complete; but there is no reason, so far as it goes, why it should not be sound and convincing — setting forth clearly and precisely what types of intelligent action animals share with us, and how much greater a range of even our simple thinking and doing lies wholly outside of their interests and their capacities.

Such reflections are brought home to the psychologist whenever he observes how willing people are to be convinced that the multiplication-table and reading and spelling fall as readily within the powers of the exceptional animal as they do within those of an ordinary child. Let us consider a group of performances that within recent years have been triumphantly heralded as proving the vast possibilities of animal education, and have been accepted by the vast majority of people for what they pretend to be. A wise horse, "Kluge Hans," has mystified Berlin audiences; and "Jim Key," another equine sage, has done the same for the American public, by going through a programme that includes adding and subtracting, and multiplying and dividing, reading and spelling, telling time and the days of the week, indicating people's ages, or sorting their letters, revealing their professions and their peculiarities, knowing the value of coins and bills, or reasoning that a circle has no corners, and even pointing out passages from the Bible! In analyzing such performances, it is indispensable to remain undistracted by what the exhibitor asserts or pretends that the animal does, and calmly to observe what

really takes place; to decide not necessarily how the trick is done, but what kind of thinking is concerned in the steps that the animal goes through. Such an exhibition may offer as interesting a study of the psychology of the audience as of the performer — a study of what people are ready to believe and why they are so disposed.

II

It requires no deep psychological insight to reach the conviction that the calculating and spelling, time-telling and letter-sorting horse would be as much of a miracle as a centaur, or a Pegasus, or a unicorn. All these creatures belong, and with equal obviousness, to the world of fable; and the one falls as far outside the realm of actual psychology as the other escapes the ken of the zoölogist. If one is inclined to regard that so obvious a proposition would at once command assent, he need only overhear the talk of those who come away from these "marvelous" performances to become convinced that in popular estimation the calculating horse and the unicorn are horses of very different colors. The latter is at once relegated to the world of myth; but the former, though not to be met with in every stable, is regarded as falling within the occasional possibilities of mundane horsedom.

If we neglect for the moment that there is absolutely nothing in a horse's life that would supply the least occasion for developing so remarkable a talent as is needed for counting or spelling, we may bring ourselves to consider what kind of a miracle the calculating horse would really be. An extravagant admirer of the Berlin

horse, in maintaining that " Hans's " education is about on a par with that of a boy (even a Berlin boy) of twelve years, has at least the courage of his convictions; nothing less would suffice to fit such a genius of a horse to handle numbers and words and the abstract relation of things, as his friends allege. And if a Zulu or an Eskimo were, after an equally brief schooling, to turn out a Newton or a Darwin, it would be rather less of a marvel.

To gain a common-sense view of the matter, observe a bright child of three years of age: note how it gives a hundred evidences for every hour of its waking existence, of a ceaselessly busy occupation with all sorts of ideas and little mental problems; how it sets up in its play one situation after another, sees new relations, devises a new use for an old toy, and creates a little world of its own imagining, for which it makes rules and breaks them, pretends that things are happening and gives reasons for their doing so; and so hour after hour proves itself possessed of a very acute little mind to which ideas and relations and situations are very interesting and familiarly handled mental tools or playthings. It is very true that much of this we know only because the child keeps up a constant chatter in its play, and speaks for itself as well as its toys or dolls, reveals its intentions in words, and thus tells the story, which without such explanation we, in our grown-up remoteness from such occupation, could but feebly understand. But the very possibility of learning all this language and of using it is itself a direct tribute to the intelligence that animates the little brain and reveals its finer quality, its greater possibilities. Lan-

guage helps, most decidedly helps the mind to grow in scope and power; but it does not create the capacity which its use requires. We have, moreover, some very interesting accounts of the cleverness of young children, who from early infancy were both deaf and blind, and who from their dark and silent world into which language could but sparsely enter, gave equally convincing proof of how busy their brains were with much the same kind of thoughts and purposes and interests as make up the mental lives of their more fortunate playmates. Naturally their doings were decidedly hampered, and their thinkings decidedly limited, by the slightness of the bond — the single highway of touch — that connected them with their fellow-beings. Such children, in almost as languageless a condition as a dog, and with far less chance of finding out what was going on in the world and of participating therein, develop into rational creatures of just that special kind of rationality that, even in its simplest terms, the brightest dog never achieves or approaches.

And now consider what a slow and weary path a bright child, equipped with all its sense and senses, and at the expense of much patient teaching, must tread before it comprehends the message of the letters, and gets to look upon "twice two is four" as something more than a rather stupid bit of memory exercise, that, like virtue, if persisted in, brings its own reward. With an inconceivably greater start beyond the dog or the horse, with a tremendously greater aptitude for just this sort of mental acrobatics, the human child must await some years of ripening of its powers, and upon that favorable foundation expend some further years

of initiation and schooling to exhibit a simple proficiency in getting meaning out of those crooked black marks on white paper, and in putting two and two together so as to comprehend the manner of its strange transformation into four. Surely, the accomplishment merits our profound admiration. To this understanding of how much is involved in bringing an apt mind to the point at which reading and calculating becomes a bare possibility, of how great a world is already conquered when the three R's begin to play even the most modest of parts, let us add one point more: When the child begins to show (and not wholly by language) that the letters and numbers have some meaning, it shows the fact so variously, while yet imperfectly, that we have constant means of testing how real its knowledge may be. We gain a pretty fair idea, in each case, how far the accomplishment is a mere mechanical trick, or a really comprehended operation. Everywhere the limitations are conspicuously obvious; and we know how gradually we must add to the complexity of the business, how readily, by only a slight change in the setting of the problem, we sink the struggling mind beyond its depth. All this is a very sound lesson in psychology to take with us, when we attend a "show" in which a horse or a dog is put through some steps, which are supposed to prove for the "star" performer a real comprehension of the message of the letters and the operations of the multiplication-table.

III

With so much of preamble, let us look at the actual performance, first as it is presented on the show-bills,

and then as it appears from behind the scenes. The programme advertising the learned performances of "Jim Key" includes among its dozen numbers such items as these: "Jim shows his proficiency in figuring, adding, multiplication, division, and subtraction for any number below thirty." "He spells any ordinary name asked him." "He reads and writes." "Gives quotations from the Bible where the horse is mentioned, giving chapter and verse"; and in addition acts as a post-office clerk or handles a cash-register. When these problems are reduced to equine terms, they prove to be simple variations of a single theme. To aid the figuring, the numbers are placed in natural order on large frames, five in a row, and five rows; and the letters, in alphabetical order, are similarly displayed. The numbers to be added or subtracted are proposed by some one in the audience, and repeated by the showman. The horse then proceeds to the card bearing the number that indicates the result, takes that card between his teeth, and gives it to his master. The same is done for words composed of letters, each letter being selected in turn.

This is absolutely the whole performance; and even when most generously interpreted bears a decidedly remote resemblance to what the posters describe. The interesting part of it all is that so many who witness this simple exhibition are quite ready to conclude that before "Jim Key" chooses his card, he goes through those mental processes which each one of the audience performs when he works out the answer to the problem as announced. This assumption is not alone wholly uncalled-for; it is actually preposterous. One of the

elementary facts that students of mind — whether of human or of animal minds — clearly grasp, is that there are vastly different ways, in this complex world of ours, of doing the same thing. The same result is reached by wholly different means. To neglect this distinction would be to conclude that because a man — or, if you like, a horse or a squirrel — avoids a certain mushroom on account of its unpleasant odor, while the botanist does so by recognizing it as a specimen of *Amanita muscaria*, all have displayed the same kind of intelligence, have used the same reasoning, because in the end they reach the same result, the avoidance of the fungus. To the simple but comprehensive statement that the horse gives not the slightest indication of going through any of these processes in order to select his card, it need only be added that he gives decided indication of going through a very different kind of process. It is not at all necessary to know precisely what special sign the horse observes in guiding his selections, in order to determine (which is the important thing) that it is some kind of simple sign, an operation that falls within this general type. The type of "Jim Key's" operation is simply that of learning to go first to a certain one of five rows, that is either the middle, or the top, or the bottom, or the one between middle and top, or the one between middle and bottom; and then in turn to select one of five cards arranged horizontally offering a similar choice. Whether the cards bear numbers or letters or Chinese characters or the Weather Bureau signals or any other markings, and whether these markings have any meaning, is as wholly indifferent to the horse as it is unneces-

sary for him to go through any reasoning process in order to select the card that he is to present as his answer. As to the precise association that an animal comes to establish between a certain sign and a certain action, and the number and complexity of such associations that he can master, there is doubtless some variation among animals, though again hardly as much as among men. It is also interesting to determine the nature of the signs, whether noted by the ear or the eye, that a dog or a horse most readily learns; but all these details do not at all modify the general nature of the operation, which mainly needs be considered. The actual indication or clue that "Jim Key" follows to reach first the right frame, and then the right row, and then the right letter, seems to be given by different positions of the master's whip. The ability to learn even this simple association is probably very limited, and in this case seems never to exceed five distinctions. Upon this slender basis of actual achievement does "Jim Key" attain his reputation as a learned thinker.

The performances of "Kluge Hans," so far as they may be gathered from the printed descriptions, are of no more complex character. The method of response is simpler, and consists of nothing more than in pawing continuously one stroke after another, and of stopping when the number of strokes corresponds to the answer of the arithmetical problem that has been set. Alphabets and "yes" and "no" must also be reduced to numbers before they fall within "Hans's" repertory. Here again, as announced, the programme is most versatile and startling. There is the same proficiency in mul-

tiplying and dividing and adding and spelling; and by an ingenious variation of the question, "Hans" will tell how many of the admiring company are over fifty years of age, or are members of a certain profession, and will paw "yes" or "no" in answer to any question to which his master knows the answer. The claims put forth on behalf of the Berlin horse — and that on the part of men otherwise versed in scientific matters — is indeed remarkable, positively astounding; for one of these attributes to "Hans" a perfect acquaintance with fractions, the ability to distinguish colors as well as playing-cards, to tell the coins of the realm, to differentiate geometrical figures, to give the time upon any watch-face, to name musical tones and tell which are discords. The method by which these answers are indicated is never more nor less than that of pawing until the correct number is reached. The more complicated replies are in the form of words; for this purpose the elementary sounds are reduced to forty-two — allowing for combinations of vowels and consonants. Accordingly, any one of these sounds is indicated by its position in *seven* places on one of *six* rows; thus for *j*, "Hans" stamps first *three* times and then *four;* and for *St*, first *five*, then *six*. Under this system the horse is actually supposed to distinguish between the ordinary *s* and the *long s* at the end of the word, between *äu* (with the Umlaut) and *au* without it, and so on. Such, at all events, is the claim set forth for "Hans's" miraculous intelligence. As a fact it is, of course, completely a matter of indifference to "Hans" what the questions may be; they could with equal success be put in Greek or Sanskrit, so long as he can

catch the right signal and stop pawing at the right time. And so again the gap between fact and fable is world-wide; and the assumption is equally groundless that any measure of the human type of reasoning intervenes to make possible the horse's replies.

Surely there is nothing in either of these performances, except the pretenses of the showman, that in the least suggests the use of any of the powers that the developing child must first acquire to gain an actual knowledge of numbers and letters. And, if we look, we shall find many indications of the quite different processes that are really concerned. The best of these lies in the nature of the mistakes that are likely to occur. For "Jim Key," these take the form of selecting a neighboring letter — an x for a y — a kind of mistake which no mind that really was doing any spelling would be in the least tempted to commit; while "Hans's" mistake consists in not seeing the signal quickly enough, and in pawing once too often or in anticipating through noting the preparation for the signal, and stopping too soon — again a type of mistake that has no relation to the actual operation of those who calculate and read. So also the scope of the questions that these marvelous animals at once attack without preliminary training shows how unrelated is the finding of the answer to the consideration of the problem. If we add considerably to the difficulty of the problem that we set to a calculating child, we must be prepared to accustom its powers gradually to the increased difficulty and to take small steps repeatedly, with much chance for mistake, in the newer processes. But these calculating horses jump at once into frac-

tions and square roots, into propositions in geometry, and equations in algebra, when some enterprising questioner proposes them. This, at all events, is true for "Hans's" master, who easily prepares the result; though in "Jim Key's" case, one sometimes suspects that the calculating possibilities of the master are not immeasurably in advance of those of the horse.

And once more — it certainly seems strange that so exceptionally educated an animal should find no other occasion to exercise his remarkable powers, should not spontaneously exhibit some original evidences of his genius, which would distinguish him from the ordinary horse. We are even tempted to pity so talented an animal with no outlet for its vigorous mind, condemned to the monotonous round of oats and hay, varied only by the tit-bits of carrot and sugar; these, however, seem to be appreciated as rewards of learning by such educated animals quite as keenly as by their untutored kind. It is also pertinent, though possibly unnecessary, to point out the inherent contradiction between the operations that a successful reply is supposed to involve and the absurdity of the failures or wrong answers that occasionally occur. Thus, this most intelligent Berlin horse, who is supposed to be acquainted with difficult mathematical relations, occasionally makes mistakes. Now, when a child makes a mistake, it is in regard to some operation just beyond its capacity, while the simpler additions and subtractions are readily accomplished. On the other hand, "Hans," immediately after giving an answer in square-root, fails to count the buttons on an officer's coat, and insists, until repeatedly corrected, that a man has three ears

and not two; or again, after making the minute distinctions of German orthography, puts *k* for *j;* and further, if this miraculous horse really distinguished the sounds and converted them into letters, why should he not be phonetically misled and occasionally substitute, let us say, a *ck* for a *k*, which would mean all the difference between *two* pawings followed by *one*, and *three* followed by *five*. Yet such objections are, indeed, superfluous, or would be were they not so commonly disregarded by the prejudice in favor of taking such absurd pretenses at their face value. In brief, it is difficult seriously to investigate these limitations in any other spirit than that of pointing out how unmistakably they indicate on the part of the horse an unreasoning, unrelated method of reaching the answer through some system of signs.

This statement of the facts of the case does not at all imply that in this performance we have reached the limits of the horse's education. Very likely the intelligent horse may be taught to go very much farther than this in the direction of his natural ability to associate signs with actions. It would, for example, be very interesting to know whether "Jim Key" could be taught, in selecting one after the other the letters that spell his name, to proceed of his own accord to the *I* after he has been led to the *J*, and then to the *M*, and so on; that is, whether he could learn to perform a *series* of selections by associating each with the one following. This would still be a task of the same order, but a more complicated one; and in investigations of this kind, earnest students of animal intelligence have obtained important evidence as to the capacities and

limitations of animal thinking. Such psychological questions are asked in a different temper from that which prompts the stage performances, and they lead to far more useful results.

IV

And so we reach the other side of our inquiry: why this kind of a performance is so generally accepted at its face value, why educated persons attribute to the horse (as they do to the Berlin horse), the insight to recognize that twenty-seven divided by seven gives three with a remainder of six, that one fourth must be added to make a unit out of three fourths, or that at 12.17 one must wait forty-three minutes for one o'clock! Indeed, so widespread were the misleading accounts of this learned animal, that a commission of inquiry was appointed to investigate the whole affair; and upon this commission sat a professor of psychology of the University of Berlin. Though the foregone conclusion was reached that the performance did not exhibit "a scintilla of anything that may be regarded as thought," it certainly seems incongruous that so serious an inquiry should have become desirable. Only one point of interest seems to have been elicited, namely, that the horse's master or the bystanders may have frequently been honestly unaware of giving the sign which the keen senses of the horse caught as the indication to stop pawing. Perhaps we need not too pointedly raise the question as to how far these exhibitions intentionally deceive their audiences. Wherever systematic training enters, it follows that the trainer must realize how wide is the gap between what is done and

what is pretended. Self-deception on the part of the showman cannot be held accountable for more than a slight portion of this discrepancy. Yet still truer is it that if people were not ready to credit such remarkable powers to the horse or the dog, such exhibitions would find no favor. It is partly because animals can really do many things that are wonderful in themselves and, if performed by men, would require considerable rational powers, that we are inclined to credit them with capacities for learning similar to our own. This tendency can be held in check only by an appreciation of the complexity of even a simple piece of true reasoning, of how essential it is to appraise an action in terms of the process that led to it, and how indirect is the revelation of process that comes from the knowledge of the result alone. When this simple lesson in psychology is clearly recognized as furnishing a sound basis for judgment, there will be less tendency to believe that horses can take unto themselves brains with a capacity to multiply and read, as to believe that a horse can suddenly sprout wings, even though such a Pegasus is pictured on the posters displayed in front of the exhibition hall.

People would also less easily succumb to such deception if they stopped to consider that in regard to these animal performances they must earn the right to an opinion by some simple measure of initiation into the arrangements of what impresses the uninitiated as a remarkable exhibition. The first attitude is naturally that of wonder, and in lack of any detailed knowledge of what the trick may be, the tendency is strong to credit, at least in part, the explanations that are

advanced. Once this attitude is overcome, and the kind of training that prepares for the performance is understood, the whole affair loses its marvelous aspect and becomes a mildly interesting demonstration of animal training. A brief glimpse of the mechanism behind the scenes is quite sufficient to balance the glare of the footlights and leave the spectator in possession of his usual measure of human intelligence that enables him to appraise sympathetically but sanely the intelligent powers of animals.

VII

"MALICIOUS ANIMAL MAGNETISM"

This study of an individual case of delusion is justified as a contribution to the psychology of conviction for the reason that it plays a part, and a strange one, in a modern cult numbering its adherents by the hundred thousands; for the further reason that the content of the delusion and the mode of its manifestation reflect older beliefs, in part through common tradition, in part through personal channels; and for the yet additional reason that a delusional conviction is also a conviction in terms of a psychology broad enough to include normal and abnormal expressions. The course of the delusion furnishes an interesting narrative, however one may view the personality of its martyr and the restricted incorporation of the belief in a movement, that in some respects is the most remarkable religious innovation of modern days.

I

The story proceeds in terms of three distinct strands of fact and argument. It may be helpful to summarize them at the outset. The first is the history of the delusion as a personal belief of Mrs. Eddy, the founder of Christian Science. The second is the historical source of the notions embodied in the belief. The third is the statement of the belief as transformed in Chris-

tian Science phraseology, with reference to the supporting theory. The strands intertwine in a composite product that is certainly unique in the annals of the closing nineteenth century.

"Malicious animal magnetism" — at times referred to in the literature of Christian Science as "M.A.M." — is a modern variety of witchcraft. It assumes a mysterious mental influence which one mind may exercise upon another to the latter's undoing. In the extreme, it is the wishing of another's death by intense and evilly disposed mental concentration.

In its anthropological kinship the belief is affiliated to the widespread superstition (particularly prevalent in the Orient and southern Europe) of the evil eye, by which is cast a spell on those upon whom it falls, when accompanied by malicious intent. "M.A.M." is a mental form of evil eye. Still earlier is the belief that the same influence may be exercised by pronouncing incantations upon any personal belonging of the intended victim. By securing a lock of his hair or the parings of his nails or anything intimately connected with his person, the spell is made more certain and deadly. Hence the care taken that no such parts of one's person or belongings shall fall into the enemy's hands, and the custom of burning these to avoid this possibility. Connected with this notion is the special practice of choosing an object which shall represent the victim, and by piercing, burning, or otherwise injuring the proxy, cause the same fate to befall the victim himself. Hanging in effigy may be interpreted as a remote application of the same underlying notions. In Hawaii the death-prayer is similarly pronounced,

and the doomed one succumbs to the dire influence.[1] These instances, which may be readily extended, show the relations of the belief in "M.A.M." to widespread notions and practices of older and cruder cultures.

In mediæval belief there was recognized a white and a black magic. The necromancer used the latter to wreak revenge upon his enemies, and offered his services to others for this end. In Christian tradition the power was gained by compact with the Devil, always regarded as the source of illicit influence. The methods of acquiring the power for evil varies with the cult in which it is incorporated. Its most general formulation is in the belief in witchcraft, which has an eventful history, spreading sporadically in successive epidemics over several centuries. Thus, one phase of "M.A.M." and its central doctrine, reflects the hold of a world-wide superstition natural to primitive religions, with interesting survivals among less enlightened communities of modern times.

The term "animal magnetism" comes to Mrs. Eddy directly from Mesmer (1734–1815). The notion is much older than Mesmer and is derived by analogy from the mysterious attraction by which a magnet draws particles of iron to itself. To the speculations of older times it did not seem remote to assume a similar magnetism acting among the celestial bodies, and an allied force affecting animal and human creation. These realms are connected in systems of astrology and occult magic. Building upon a confused mixture

[1] The theme is used in the modern drama of *The Bird of Paradise*. Here the forsaking of the ancient tribal gods is avenged by causing the apostate — a native maiden married to a foreigner — to offer herself as a sacrifice to the burning volcano to appease its anger.

of such notions, Mesmer reached the conclusion that diseases could be cured by applying actual magnets to the bodies of patients, thereby evoking symptoms (after the manner of crises) and through this procedure inducing a cure. In a later stage of his career, he built a large tub or *baquet* after the manner of a great battery. The tub was filled with iron filings and other paraphernalia; from it emerged bent iron rods which the patients seized. The usual symptoms, suggestive of hysterical attacks, ensued. Still later Mesmer claimed the power to magnetize water, or a tree; he claimed that the magnetic fluid flowed freely from his person, and thus introduced the notion of a peculiar force exercised by specially endowed persons, and capable of influencing others, particularly in the cure of disease. Still adhering to the older notions, he induced the "crisis" by making passes and strokings with his hands, from which the personal magnetism was supposed to flow. Even in Mesmer's day it was demonstrated that the "crises" and symptoms and cures proceeded as well without the "magnetic" apparatus as with it; for they were due to suggestion and mental susceptibility. At first by a few advanced students, and then more generally, the source of the phenomena was correctly referred to the nervous susceptibility of the subject; the state was called "artificial somnambulism," in view of its close relation to the state of a sleep-walker. Still later (1840) James Braid correctly recognized the physiological basis of the condition and called it "hypnosis" — an induced sleep-like state. The older notions survived and were continued by the popularity of hypnotism as a stage perform-

ance. The "hypnotizers" kept alive the pseudo-scientific belief in the personal power (or magnetism) of the performer; they demonstrated dramatically how completely the subject's senses, movements, and ideas were controlled by the fiat of the hypnotist's word.

The further history or analysis of hypnotism would lead too far afield.[1] With the aid of this outline the place of "animal magnetism" in the history of Mrs. Eddy's delusion will be intelligible.

II

Next to be considered is the personal aspect of the delusion in relation to Mrs. Eddy's mental development and the incidents of her decidedly bourgeois life. Her early history is that of a nervous invalid. In search for health she came under the treatment of "Dr." P. P. Quimby, who may be said to have been the earliest American mental healer. In an original way he absorbed the principles of treatment by *mental suggestion*, to which the successors of Mesmer were turning, and introduced into it a little philosophy and a good deal of religious faith. There can be no doubt that the basis of the Christian Science healing practices and of most of its theory is Quimbyism.

In his earlier days Quimby hypnotized by passes after the Paris fashion, prescribed drugs, and at the same time gave suggestions, consolation, and advice. His mature system was one of pure mental healing, directed to the removal of symptoms and anxiety. It was in contact with this changing atmosphere — from

[1] It is considered in "Hypnotism and its Antecedents" in my *Fact and Fable in Psychology*. (1900.)

mesmerism to suggestion — that Mrs. Eddy grew to a late maturity. By it her ideas were shaped.

It was also at this time that hypnotism came to America from France. In part the older "mesmeric" notions were adhered to, but the newer ideas of an artificial somnambulism and a directly mental influence were gaining ground. The passes and strokings, that were thought at first to convey the magnetic fluid, were retained, but only to render the subject attentive and passive. M. Charles Poyen was the intermediary between Mesmer and Mrs. Eddy, and may actually have looked upon the faces of both. He lectured in New England and gave stage exhibitions with hypnotized subjects at the time when Mrs. Eddy, in her search for health, was inclining to mind-cure. She must have seen these passes and strokings and rubbings, which put the subjects at the mercy of the mesmerizer. She must have seen the "mesmerized" subjects helplessly go through strange antics at the behest of the operator, and may have been impressed with the possible abuse of such power. At all events, these *manipulations* remained with her as the embodiment of *animal magnetism*. As she grew away from everything material and held mind to be all, this earlier system became to her the symbol of error, of everything awful and malicious.

Thus it came about, when Mrs. Eddy developed as the cardinal principle of Christian Science the denial of everything material, that the last survival of anything visible or tangible in the system which most had helped her, became the basis of her delusions of suspicion and persecution. Her published

writings refer to the subject frequently. The following paragraphs express her attitude: —

> As named in Christian Science, animal magnetism or hypnotism is specifically a term for error or mortal mind. . . . This belief has not one quality of Truth or Good. It is either ignorant or malicious. The malicious form of hypnotism ultimates in moral idiocy.
>
> When Christian Science and animal magnetism are both comprehended, as they will be at no distant date, it will be seen why the author of this book has been so unjustly persecuted and belied by wolves in sheep's clothing.
>
> The author's own observations of the workings of animal magnetism convince her that it is not a remedial agent, and that its effects upon those who practice it and upon their subjects who do resist it, lead to moral and to physical death.
>
> The likely forms of animal magnetism are disappearing and its aggressive features are coming to the front. The looms of crime, hidden in the dark recesses of mortal thought, are every hour weaving webs more complicated and subtle. So secret are the present methods of animal magnetism that they ensnare the age into indolence and produce the very apathy on the subject which the criminal desires.

Whatever may be the obscure meaning of these passages, they indicate a strong desire to establish the complete originality of the Christian Science doctrine. They make animal magnetism the dangerous counterfeit and denounce the material aids in its practice not alone as useless, but as resorted to only with vicious intent.

From here on, the story of "M.A.M." is the story of Mrs. Eddy's personal relations to the belief. It is closely bound up with the early history of Christian Science. It grew by deeds and doctrines, at first most slowly, and later with astonishing rapidity. The fame of the cures kept the movement alive; classes were formed and disciples trained; a religious doctrine was developed.

Mrs. Eddy's strength as a leader lay in teaching and expounding. She was much too nervous, too ill at ease, too self-centered, to minister to others. For the sympathetic treatment that should remove doubt, inspire hope, and counsel wisely, she depended upon more confident, better-poised natures. In her early, difficult days, she found a young, able, and willing partner in Richard Kennedy. Kennedy was a practitioner interested in results and not over-impressed with the verbal statements of Mrs. Eddy. In his treatment he used rubbings of the head as well as suggestion and denial, as he was taught by Mrs. Eddy and through her by Quimby. Mrs. Eddy was a trying companion and leader, and a bad loser. The rupture came when she accused Kennedy of cheating at cards. He left her, established an independent practice, and became the first Christian Scientist accused of practicing "M.A.M." Mrs. Eddy promptly laid the falling-off of her success, due to Kennedy's withdrawal, to his sending out adverse mental influences both against her and to prevent others from joining the movement. She accused him of using his powers on patients, not to cure, but to aggravate their sufferings. This she called "mental malpractice." It was all rather confused in her mind and in her language. One notion persisted: that this evil mental influence causes suffering to its victim. The mental thought, being the sole reality, causes the disease and disaster which mortal mind is somehow compelled to recognize. That is precisely the primitive notion that keeps superstitions alive, manufactures evil charms, and places them in the enemy's house. Mrs. Eddy's language is interesting: —

Among our very first students was the mesmerist aforesaid, who has followed the cause of metaphysical healing as a hound follows his prey. . . . This malpractitioner tried his best to break down our health before we learned the cause of our sufferings.

His mental malpractice has made him a moral leper that would be shunned as the most prolific cause of sickness and sin, did the sick understand the cause of their relapses and protracted treatment, the husband the loss of the wife, and the mother the death of her child.

Filled with revenge and evil passions, the malpractitioner can only depend on manipulation, and rubs the heads of patients years together, first incorporating their minds through this process. . . . Through the control this gives the practitioner over patients, he readily reaches the mind of the community to injure another or promote himself, but none can track his foul course.

Sooner suffer a doctor infected with smallpox [1] to be about you than come under the treatment of one who manipulates his patients' heads.

The distance from ordinary medical practice to Christian Science is full many a league in the line of light; but to go in healing from the use of inanimate drugs to the misuse of human will power is to drop from the platform of common manhood into the very mire of iniquity.

Thus early in her career "M.A.M." became to Mrs. Eddy her "black beast," as the French say, her "hoodoo" in popular superstitious phrase. To her it was dead earnest and a real beast. It made her an invalid and crossed her moods. It made her affairs go wrong and kept her poor. It set people against her and thwarted her plans. Most of all, it was used by traitors and enemies — by those who deserted her and took to successful mental healing on their own account.

[1] The admission that there is such a thing as smallpox infection is, of course, inconsistent with Mrs. Eddy's precepts, as with her many denials of its reality.

As one leading disciple after another tired of her tyranny and her nerves, he was turned against and accused of "M.A.M." The delusion grew, fed by personal grudge. It took on definite shape as she shaped her system, and was made part of it.

Kennedy's successor was Daniel Spofford. The new form of treatment was now called "metaphysical healing." Spofford did not manipulate, but practiced successfully by mental suggestion. In 1877 he, in turn, came under the ban. He left Mrs. Eddy, who thus referred to him in the hurriedly prepared second edition of "Science and Health": —

> Since "Science and Health" first went to press, we have observed the crimes of another mesmeric outlaw, in a variety of ways, who does not as a common thing manipulate, in cases where he suddenly attempted to avenge himself of certain individuals. . . .

In 1878 Mrs. Eddy, or her supporters, so worked upon the mind of one of their patients — Miss Lucretia L. S. Brown — as to gain her consent to bring suit against Spofford as a mesmerist. In the case of Miss Brown, he was charged with causing "by said power and art great suffering of body and mind and severe spinal pains and neuralgia and a temporary suspension of mind, and still continues to cause the plaintiff the same."

Mr. Spofford, so far as known, is the last person tried for witchcraft in a court of law. With strange dramatic justice the court sat in Salem, the seat of the only American epidemic of witchcraft. The attorney for Miss Brown was Edward J. Arens, Spofford's successor, and himself the next to be accused of "M.A.M."

Witnesses testified to the reality of the malicious influence mentally administered; but the ridiculous charge was ruled out of court.

It is said that Mrs. Eddy, at successive phases of her career, kept pictures of Kennedy and Spofford and a third foe, Arens, in her room, the two former marked with a black cross, the latter with a red cross, to aid her mental resistance.

No less remarkable an incident is the controversy surrounding the death of Mr. Eddy. On June 5, 1882, Mrs. Eddy gave out this interview: —

> My husband's death was caused by malicious mesmerism. Dr. Rufus K. Noyes, late of the City Hospital, who held an autopsy over the body to-day, affirms that the corpse is free from all material poison although Dr. Eastman[1] still holds to his original belief. I know that it was poison that killed him, not material poison, but mesmeric poison.

Mrs. Eddy was confident that she could have saved her husband by counter-thought, if only she had not been so occupied with her work, and had realized the power of the mesmerists. She says: —

> Oh, is n't it terrible that this fiend of malpractice is in the land! After a certain amount of mesmeric poison has been administered, it cannot be averted. No power of mind can resist it. It must be met with resistive action of the mind at the start, which will counteract it.

"The atmosphere of Mrs. Eddy's house derived its peculiar character from her belief in malicious mes-

[1] The Dr. Eastman in question was a quack. Mr. Eddy fell completely under the sway of Mrs. Eddy's delusions. He shared in the suspicion of constant danger, and often ran to the shelter of a friendly door to avoid the mesmeric miasma. The notion of thus mentally absorbing poison seems to have been his contribution.

merism, which exerted a sinister influence over everyone under her roof. Her students could never get away from it. Morning, noon, and night the thing had to be reckoned with, and the very domestic arrangements were ordered to elude or counteract the demoniacal power. If Mrs. Eddy had kept in her house a dangerous maniac or some horrible physical monstrosity," [1] the situation could not have been worse. If the water-pipe froze, or the wash-boiler leaked, or her servants were negligent, or her dressmaker was awkward in fitting, it was all the work of her enemies, accomplished by mental projections. Her mail, certain letter-boxes, certain streets, became infected with mesmerism. At one time she was convinced that the telegraph office at Boston was in the hands of her enemies, and sent a message to Chicago from West Newton via Worcester. She wanted her students to remain in Boston on the Fourth of July, a day when "mortal mind was in ebullition," to help her oppose the evil. She believed in a real "printer's devil," and attributed the delays in printing her "Science and Health" to mesmerism. She set her students to treating mentally the pressmen against delays, and when the sheets were ready, asked them to turn their thoughts from the press-room to the bindery. Her letters are full of it; and nothing seems to irritate her more than a slighting of this essential dogma of her creed.

III

To consider the case of Mrs. Eddy scientifically is to consider it objectively. The details are naturally

[1] Milmine, *The Life of Mary Baker G. Eddy*, p. 301.

personal, but the interpretation proceeds by accredited psychological principles, as objectively applicable to this case as to any other. The fact that the patient was the founder of a prosperous sect, and the reverence of her followers for "Mother Eddy," are incidents with no special bearing upon the central interpretation. In the actual development of Christian Science the part to be assigned to Mrs. Eddy is also readily over-estimated; dependence upon others, passive acceptance of fate, fortunate circumstances in the management of her campaign, and the public state of mind, were also decisive in the movement, which after years of struggle brought her notoriety, wealth, and an amazing following.[1]

The case of Mrs. Eddy is the case of a nervous invalid with a highly irritable constitution becoming a chronic victim to delusions of persecution. The textbooks on insanity give many cases of the remarkable persecutions to which such victims have regarded themselves as subjected. They believe themselves poisoned, drugged, threatened by voices through the walls or the telephone; they see secret enemies in visitors, and find hidden meanings in letters. A common form

[1] One phase of Mrs. Eddy's mentality suggests a Freudian interpretation. She was very aggressive on the matter of the originality of Christian Science as her creation or special revelation. In consequence she denied any obligation to Quimby and concealed the evidence of her dependence. She quarreled with those who had helped her and denounced them. This attitude implies the subconscious sense of her dependence, even of her inferiority; the insistence becomes a form of compensation for her incapacity. It may be traced in her writings, in her relations to the Mother Church, in the incidents of her life. The delusion of "M.A.M." is clearly related to this cluster of beliefs; it expresses the "fear" aspect accompanying the self-assertion by way of consolation.

of the delusion makes its source mystic. The evil comes by thought-waves, by telepathy, by brain-vibrations, and by magnetism. The evil designs are ascribed to definite personal enemies. The form of the persecution and the selection of the enemies are shaped by circumstances. The personal history of Mrs. Eddy places her delusion of "M.A.M." plainly in the same order of cases.

How the delusion might have developed had it remained purely personal and not attached to a system of belief, it is impossible to determine. It is clear that her system was shaped to admit and express the delusional symptoms. It is clearer still that the tyranny of the delusions affected the doctrines, yet affected still more Mrs. Eddy's attitude to her followers and all the personal details of her administration. Her feeling of helplessness and her dependence upon others were directed by this delusional fear. She always needed a buffer against "M.A.M." When she wished to write and found the writing slow and unprogressive, she appealed to her students: "Direct your thoughts and everybody else's that you can away from me; don't talk of me." "Those who call on me mentally in suffering are in belief killing me."

It is related that at the time of her indignation against Spofford, Mrs. Eddy induced twelve of her disciples to arrange a continuous mental session of twenty-four hours, each student holding his thought for two hours, willing the downfall of Spofford. Her son, Dr. Foster (whom she adopted when the latter was forty-one years old), served as a shield to offset the adverse treatment of the enemy; when he was dismissed, others

served to conduct the evil forces away from Mrs. Eddy by vigorous counter-statements.[1]

It is plain that such actions and beliefs as were exhibited by Mrs. Eddy would be set down as those of an abnormal, neurotic, unbalanced person. The notoriety of the patient should not in the least affect the diagnosis; though so conspicuous a career necessarily and deeply modified the evolution of the case as a whole. The reactions to a personal experience, as vitiated by an unfortunate temperament, constitute the most significant exhibit in the origin and status of "malicious animal magnetism." The "animal magnetism" is an accidental reference due to circumstance, and as a name is almost meaningless. It represents the formulation of her delusion. The "maliciousness" is a personal reference, and is an essential trait in delusions of persecution.

Just how far Mrs. Eddy's case can be more minutely diagnosed or classified is not altogether clear. The medical details are lacking; her early obscurity and the attempts to shroud her personality in mystery increase the difficulty of arriving at a clear decision. There is, however, no hesitation in reaching a diagnosis of a mentally abnormal condition — an inherited neurasthenic diathesis, in its later development tending toward a paranoiac state. Mrs. Eddy's case has been diagnosed as paranoia on the basis of the documents of the case. Paranoia is a polite Greek term for a

[1] In 1908, when Mrs. Leonard, living with Mrs. Eddy, died, it was said that her death was due to "M.A.M." as exercised by a faction opposed to Mrs. Eddy, who willed her death by "statements." Thus, saving her patron by acting as a shield to receive the "M.A.M.," she lost her life.

marked and limited or one-sided eccentricity and irresponsibility. In slang phrase its equivalent may be rendered as "being a little off" or "cranky." Many paranoiacs are markedly and dangerously insane; quite as many suffer from harmless delusions. Still others are in the borderland, and except in certain relations may lead outwardly responsible lives. The paranoiacs form the most elusive, the most individual, the true *élite* of the great borderland where dwell the eccentric and the ill-balanced. Mrs. Eddy's is the rare but not unique case of a religious paranoiac with a following. "Paranoiacs," writes one authority, "form the aristocracy of asylums; indeed, the majority of them have little difficulty in avoiding confinement in them." Mrs. Eddy deserves a high place in this aristocracy.[1]

IV

The fact that the doctrine of "M.A.M." is so largely a personal contribution appears in the trouble it has caused in the camp of the faithful. Many of the defections from the faith have been due to the resistance to Mrs. Eddy's pet doctrine. When, in 1888, she gave a course of six lectures on "obstetrics," five of which were taken up with "M.A.M.," the students, who had paid high fees for the privilege of attending them, naturally rebelled. It is known that the revisers of her

[1] For the details of Mrs. Eddy's life and personality the reader must consult the *Life of Mary Baker G. Eddy*, by Miss Milmine.

As contributory to the medical side of the case, the following detail may be cited: A significant paranoiac symptom is the use of words in strange and forced meanings, with a marked verbal obsession. A certain simple verbosity goes with it. In this case the medical analogies prevail. The use of such terms as "obstetrics," "malpractice," "mental poison," "metaphysical healing," illustrate the result.

works have stricken much of the record of her peculiarities from Mrs. Eddy's official writings, and have been strenuous in withdrawing the rare earlier editions of "Science and Health," that disclose the personal hold of this strange doctrine; this applies particularly to the third edition, which contains a remarkable chapter on "Demonology," in itself a conclusive document proving her delusional state. The earlier issues of the "Christian Science Journal" mention cases of successful treatment against the invasion of "M.A.M." In the daily press of the period the diligent student may find mention of occasional protests, when patients die of recognizable diseases, while the family insist upon a diagnosis of "M.A.M." — quite in the manner of primitive times or the darker ages. It is, however, difficult to say that the doctrine was generally accepted by Christian Scientists; a tendency to ignore the matter as a regrettable incident was the more common attitude.

Yet so late as 1909 a renewed outburst of the delusion appeared in sensational form. By this time factions and dissensions had arisen, as is not unusual in a personally controlled church. Mrs. Eddy was an old and very feeble woman; and the question of the bestowal of the mantle of the prophet was variously discussed. The most influential and independent candidate was Mrs. Augusta E. Stetson, leader of the movement in New York City, who was bitterly denounced by Mrs. Eddy. It was against Mrs. Stetson that a member of her church raised the accusation of "M.A.M." Here is a part of the victim's story: —

At midnight, I was awakened by an icy blast sweeping through the open window from the direction of New York. My teeth chattered. My heart fluttered. Luminous waves rolled toward me, covered with the faces of the dead. I felt just like a man being electrocuted. It seemed, indeed, that my soul went from my body, that I saw through the walls of my house. And in the hour of agony I saw Mrs. Stetson's blue eyes all around the room.

Like the afflicted of old, she took to her Bible to overcome the unseen foe, but to no purpose. The chill continued; in despair she turned on the steaming water in the bathtub, but could feel no heat. The contest went on.

Impersonal, Ever-present, Omnipotent Love bore me up beyond the reach of the would-be midnight assassin, the human hatred of truth, the mad ambition for the personal place and power. . . . Still shivering from that boiling bath, I groped about for the most elaborate piece of darning I could find, and sitting up in bed, pushed the needle to and fro while my parched lips muttered, "God is all; God is good; nothing can harm me." As I sat there, my husband staggered up the stairs and into my room.

"My God!" he exclaimed, "what has happened to me? Coming out on the train I felt as if I were going to die. I am suffocating."

This is clearly the hysterical tale of a badly frightened woman, under the spell of a set of ideas imposed by her religious faith. But hot baths, darning, and prayers would not have been called upon if the victim had not seriously believed that Mrs. Stetson, by fixing her thoughts with malicious intent, was causing this midnight agony many miles away.

The story, of which this incident is a part, is set in the usual commonplace conflict of money and ambition and influence. Step by step Mrs. Stetson induced

the convinced disciple to give far more largely to the support of the church than her means allowed. When a gift of fifteen thousand dollars for an organ was arranged, the husband protested; the gift was withdrawn, and the money used to build two country houses. The withdrawal from her vows preyed upon the mind of the disciple, and then came the blighting of her ventures and the "death-thought." "My baby was born soon after, but only lived several days. Every pet I had died. Every flower I touched withered. Ill-luck attended the building of my houses." In the end, the power of fear prevailed; one of the houses was sold, and the church shared in the proceeds.

And this, so far as can readily be determined, is the last incident in the drama of "M.A.M." With Mrs. Eddy's death in 1910 the delusion lost its personal vitality. Never eagerly accepted by the disciples, it naturally faded from view.

V

The belief in "malicious animal magnetism" can readily be derived from the theory and practice of Christian Science by carrying them to the further conclusion that what cures may kill. If denying ills annihilates them, why should not asserting ills create them? The existence of the force and its use for good or ill are distinct. If the doctrine that all reality is mind accounts for the benefits which the practices of Christian Science confer when beneficently used, it equally supports the possibility of "malpractice" or the "death-thought." Both practices, benevolent and malevolent, are forms of "absent treatment"; the one is

as consistent with the underlying principle as the other. In the Christian Science ritual the healer and his company are thoroughly convinced that the deluded patient has no disease. They deny the reality of disease; they intently wish that the patient should not believe in it. They make "statements" that pneumonia or rheumatism or typhoid fever or smallpox does not exist; that the patient will presently be released from the belief that he has it. They *state* the beneficence of God, the healing power of Christian Science, and by repeated and insistent declaration they demonstrate away the belief in disease. Change all this procedure from a blessing to a curse, but retain the faith in the power of wishing and believing, of stating and affirming, and of other verbal substitutes for reality, and you can inflict injury and make things go wrong, just as the reverse process makes them go right. That is all that is necessary to reach the notion of mental "malpractice." Intensify it all as you would in treating a mortal enemy, and you have the "death-thought."

The fact that "M.A.M." remained so largely a personal conviction of Mrs. Eddy without ready acceptance by her followers shows that irrationality in a modern environment has its set limitations. Mental epidemics find resistances in the educational accomplishments of the American democracy. The spirit of the age, though demonstrably tolerant of such startling logical performances as the success of Christian Science attests, none the less sets up restraining influences upon the extent to which that process may go, even in a system of thinking that in so many ways deserts the logic that makes the spirit possible. Irra-

tionality as well as rationality has its limitations; and thus is the psychology of conviction complicated. It is hardly conceivable that such a delusion as a malicious mental influence would develop to a general mental contagion, however strongly incorporated in the doctrines of a sect, and however strongly these doctrines repudiate the claims of reality and the logic of daily life. The loyal Christian Scientist may tolerate or cherish large reserved areas of belief in which an alien logic rules; he is, however, careful to draw the boundaries between these areas and the practical field of operation of his business affairs. He is hardly likely to treat in the same manner a Christian Science *statement* and a bank statement; nor will he assemble a company and ask their aid toward increasing his balance in the bank by throwing forth intense mental vibrations, or have a fear that his balance will be endangered by the malicious mental concentration of his rivals; he is not likely to believe that fluctuations of stocks can be brought about by "absent treatment" on the part of "metaphysical" bulls and bears. It is interesting to observe that the integrity of a practical reason resists the encroachment of inconsistency, even when reinforced by religious faith; and it is equally interesting to observe that in the actual experience a saving moral integrity does the same.

The easy-going public is content to concede that if the conviction of the reality of mental waves, even if it implies the unreality of microbes, helps some persons in the recovery from ills that the denied flesh is yet somehow heir to, and if there is some real satisfaction in considering the troubles so treated not as dis-

eases but as mental "errors of mortal mind," so let it be; democracy is tolerant intellectually as well as politically. But if this force is used to inflict injury, even those convinced of the underlying doctrine hesitate or refuse to accept the conclusion consistent with their inconsistent logic, and certainly refuse to apply it. The psychology of conviction in such issues develops a logic of its own. When hard-pressed, consistency yields to morality; ethical notions and habits exercise their restraints upon thought as upon action; for this, too, is part of the general psychology under which convictions alike develop and become practically operative in conduct. Principles and practice are most complexly and flexibly connected and construed, and the influence of reserved areas of thinking makes itself felt. Moreover, the principle of satisfaction prevails. The converts to Christian Science are attracted to it not by its logic, but by the solace it offers; they find this solace in the one aspect of its doctrines — the denial of ills and the cure of so-called disease — and not in the other — the belief in a malicious use of the same order of agency.

In so far as the psychologist may undertake the guardianship of mental health, he is bound to regard the menace of unreason with comparable concern, alike when the false beliefs which it fosters are apparently innocuous and when they are palpably dangerous. For the difference in no small measure lies in the limitations placed by the restraints of sanity upon the degree to which the invasion of reason is carried in the direction of influencing conduct. The type of thinking that leads to the acceptance of such Christian

Science doctrines as that there is no difference in the manner in which smallpox spreads and that in which fear or the blush of shame spreads, is logically in line with such beliefs as the deadly power of a malicious mental force. A critical reviewer of recent "mental healing" movements charges Mrs. Eddy with "doing all she could to revive in our generation the panic fear which oppressed all Europe for centuries," and finds the temper of believers in "M.A.M." comparable to that which "tortured and put to flame thousands of friendless old women." The temper is unquestionably malignant, but is itself tempered by a saving common sense. Large collective delusions would have to make their way against all the bulwarks that science and humanity, experience and common sense, have built about sanity and sound judgment. Twentieth-century minds are too busy with realities, too saturated with wholesome and profitable ways of thinking, too grateful for the benefits derived from science and a sturdy practical sense, to desert approved standards, tried and true, at the call of any belief, however deep the loyalty that it claims. Yet outside its familiar interests, the average mind is open to the lure of doctrines whose very obscurity silences reason and induces a feeling of plausibility, dulling the sense of incompatibility with the logical standards of daily life and sound science. The great procession of Mrs. Eddy's followers does not mean that those who subscribe to her pseudo-philosophy are going to regulate their behavior or their business on the theory that nothing exists but mind. It means that on one side of their natures they are willing to yield to the persuasiveness of doctrines

that would make the rest of their thinking and doing utterly nonsensical. In that kind of tolerance there is a real menace to rationality. The whole purpose of education is to make men reasonable, so that when necessary one may reason with them. Any tendency that promotes irrationality is a serious menace to mental health, even though it affects directly only a small part of the community, and affects them in but a detached portion of their attitudes and actions.

If a movement can give shelter to so pernicious a doctrine as "malicious animal magnetism" and even in isolated cases lead to such procedures as those cited, it shows the menace to rationality inherent in a departure from straight thinking; for this type of departure is a reversion to the swaddling stages of intelligence, favorable to superstition and the vain pseudosciences of an outgrown past. In this sense there really are malignant mental germs; and one can never tell where, despite modern precautions in mental hygiene, such germs may find a culture-bed suitable to their propagation. Even a limited contagion deserves the serious attention of the guardians of mental health.

The type of argument concerned in this study suffers from the psychological influence that the belief affects the result; an apparent verification is in reality a prepossession. Unquestionably the successes of treatment by the ritual of Christian Science demonstrate the power of belief to aid and abet the recovery of patients, particularly those of marked nervous susceptibility. Judicious neglect is often the best prescription for troublesome symptoms aggravated by worry and morbid habits, and thus deprived of nature's

healing powers. Over-attention to ailments, fear, anxiety, distrust, hopelessness, react unfavorably upon the prospects for recovery. Poise and confidence, however acquired, relieve these obstacles to progress. The Christian Science attitude shares in these benefits; but to ascribe the benefits to the doctrine, or to see in them a proof of the doctrine, is an obvious or a subtle fallacy according to its setting in the minds of those misled by the argument. That similar benefits may be reached along the highways of reason quite as surely as along the byways of unreason, is equally true. If so reached there will be no tendency to extend the principle beyond its warrant; such extension is the supreme danger. The failure to distinguish between organic and functional disorders, the willingness to expose others to violently contagious diseases, the refusal to employ approved precautions and remedies, are all most unreasonable convictions. The fact that they may be derived from the fundamental proposition that there is no reality except mind, and once thus derived are put in practice, is far more menacing than a weak and unapplied belief in "malicious animal magnetism." This statement is pertinent only in that it calls attention to the menace of reason inherent in the principles of "Eddyism"; the examination of this strange doctrine, or of the truths regarding mental healing which it uses and abuses, is not germane to the present excursion into abnormal logic and abnormal psychology.

A false and shallow view of the principles of mental action operates in the preparation of the soil for the spread of delusion; for this reason both aspects, true

and false, must be considered. The principle itself is well recognized. It operates in crude as well as in refined settings. Travelers among primitive peoples relate that the warriors ordinarily recover promptly from spear-wounds, but not if they believe the spear-heads to be poisoned. But to regard the mode of action of the belief the same as that of the poison is to ignore the distinction between the subjective and the objective, which is the criterion of sanity. Voltaire satirically remarked that he was fully persuaded that incantations together with a sufficient dose of arsenic would kill your neighbor's sheep. As a practical matter, we live in a dual world. If we lived only in the world of matter, we might come upon arsenic and not upon incantations; and if we lived only in the world of mind, we might come upon incantations, but not upon arsenic. But to conclude that because there are incantations, therefore there is no arsenic — to say nothing of announcing this absurdity as a great discovery — is the height of unreason; and the attempt to apply it, either by reviving a fear of incantations or by removing the poison-labels from bottles of arsenic is equally though differently dangerous. It is such an attitude favorable to unreason that the confusions fostered by Christian Science doctrines make possible; only on the basis of such a departure from a sound logic would it be possible to graft the delusion of "M.A.M." Such a conviction, despite its personal aspects as an individual delusion of suspicion and persecution, has a more general significance in the setting and development that accompany it, and thus contributes to its psychology. It takes the modern mind back vio-

lently to the cruder thinking of an outgrown past, and indicates that the same mind, in spite of educational opportunities, may succumb to the same disturbing forces that make the history of conviction so instructive, while yet at times so discouraging a psychological record. It illustrates also how gradual and uncertain is the transition from weak to perverse thinking; that with the restraints and guidance of logic overturned, the issue readily turns from the illogical to the pathological. For the temptation to delusion proceeds upon the attraction of a conclusion to a disordered mind. The psychology of conviction must be conceived broadly enough to include a study of deviations as well as of conformities; for both are of one genius. Sanity lies in the adjustment of psychological tendencies to logical restraints. The study of conviction derives its value jointly from both sources, often with unexpected illumination from the more irregular aspects, as shadows bring out the high lights and the entire picture in more vivid perspective.

VIII

THE DEMOCRATIC SUSPICION OF EDUCATION

In the survey of "cases" of conviction the transition is now to be made to the active arena of controversial questions. As a part of their history all important beliefs have passed through controversial stages. In the process of establishment the newer candidate encounters the accredited prestige of the older claimant. Dispossession in intellectual sovereignty is difficult; for it must overcome the conservative forces of adjustment and the adherence to systems and causes that have grown into the intellectual and emotional fiber of both popular and influential conservative minds. The raising of doubts disturbs an adjusted attitude; this is naturally an unwelcome procedure. When it meets the entrenched positions that have been long occupied and have developed cherished associations and warmly espoused loyalties, its reception is still more aggressively resisted. Heresy is the familiar charge that brings the issue to trial; persecutions for radical, dissenting, subversive convictions are frequent and far from creditable incidents in the history of thought. When excommunication and social ostracism are superseded as incompatible with the accredited standards of tolerance, ridicule and suspicion may take their place. The controversy that displaced the earth from its central position in the cosmic

system, the displacement of miracles by the rigid uniformity of natural law, the displacement of "special creation" by evolution, — all furnish examples of the opposition which great convictions encounter, of the bitter controversies through which they emerge to their rightful place. Prestige, prejudice, convention, and the entire array of conservative social forces enter into the psychology of the conflict. This field, however dominant its importance in the general history of science, is not the one to be selected for illustration of the psychology of controversial issues; for these, to be typical, must deal with living, shifting, present-day problems. The older controversies, though their lessons are not remote, have no decisive bearing upon the attitudes that affect our convictions or with which we sympathize. The weapons employed in the intellectual campaigns of the past are obsolete in our twentieth-century equipment. In the progressive warfares of the mind the armament changes as radically as in military operations. In both fields war motives are more enduring than the settings and the instruments of the conflicts.

Displacements and replacements, reformations and renaissances, are inevitably gradual in their progress, however sharp and critical the attack and defense at the moment of the conflict. Certain orders of convictions are markedly fluid in their establishment, are much like dissolving views in the manner of the wane of the old and the yielding to the new. The emphasis and the rendering change, rather than the theme. An altered manner and method of procedure, more congenial to the spirit of the incoming age, characterize

such movements; the waves of their progression form in contours of a gentle sweep. Such plastic convictions are determined less by newer orders of knowledge than by newer insights and interpretations. The controversy is real but never critical; gradually, without convulsion, the old order passes. Peace ensues without aggressive victory; an altered attitude, like the calm after a storm, settles upon the same scene, yet transforms its complexion. The changed status of women, the attitude toward war, the place yielded to indulgence in the social code, are but a few of the many examples. In their discussion the shift of emphasis and of point of view bring other orders of consideration to the foreground, and retire the prominent features of yesterdays. A change of interest becomes as significant as a change of conclusion.

By a proper selection of "cases," controversial psychology may be portrayed in the making, with the intent to interpret its nature and to render its spirit. In such an essay a unifying interpretation is decisive; the features are given, but the expression must be brought out. Such portrayal is entirely compatible with an intent to incline conviction toward one position and away from others; there should be no propaganda, but there may properly be an array of the evidence toward a consistent exposition, by which the mind is won to a satisfying conclusion. The argument proceeds upon a psychological understanding of the complex forces that shape conviction as affected by temperaments and circumstances. Selected surveys of living controversial issues may prove rich in illustrative value and profitable in consideration.

The theme introducing the controversial group — by way of overture, as it were — is of somewhat different status. The position of education in the system of acquiring social control is apparently uncontroverted; the opposition is apparently non-existent. But it is possible to summon the plaintiff and obtain a statement of the charge. Despite appearances, education is really placed upon the defensive, and in varied forms of expression has always been so. The suspicion of education is of ancient lineage, though no more venerable than the respect, even the awe or fear of learning. In the history of the intellectual classes there is some justification for the distrust. In the beginnings of culture the priest medicine-man was the sole representative of the *savant*. Learning conferred a somewhat mysterious power to influence fate; the possibility of using the knowledge-control to work ill, as well as the intangible nature of the gift, gave rise to awe and fear. Soothsayer, interpreter of omens and the signs of nature, magician and depositary of lore, the proof of his art was a practical test — the power, like that of Aaron, to do something beyond the ordinary capacity, to transcend common experience. When miracles were demanded, the temptation to resort to trickery was strong; and the play upon ignorance would readily convert even a modest accomplishment into a marvelous power. Thus set apart, the wise man may put his prestige to too severe a strain, or he may exercise his calling in an unpopular cause; also his pretenses may have been disclosed sufficiently to arouse suspicion of his office. Under a possible twofold application of the power conferred by knowledge — so long as the

methods of securing intellectual control were feebly understood — there arose in mediæval times the distinction between white magic, exercised in approved ways, and black magic, which was evil and presumably conferred by compact with the Devil. The employment of this Satanic aid was the theme of the drama of "Friar Bacon" and of the "Faust" legend; and through these this aspect of the exhibition and the suspicion of learning was made familiar. In a measure the suspicion under which the wielders of the black art labored, extended vaguely and moderately to learning in general.

In any modern setting the suspicion is differently exercised; its center is shifted. A vast amount of control has come directly out of practical experience, quite detached apparently from the scholar's professional activity. Technical skill arising from direct doing and from a rigidly practical learning, acquires a standing in rivalry to the form of control conferred by the study of principles, which we know as science; for science is the accredited form of control succeeding the ambitious search for the essence of things, which captivated the mediæval mind and gave its arts their magical aspect.[1] Thus theory and practice, which in reality are inseparable and mutually dependent, came into a sharp and unfortunate rivalry. What really happened was that principles once arduously gained by progressive and original scholars became so familiar that they were absorbed in common knowledge. Prac-

[1] An aspect of the old-time search is considered in the "Modern Occult" in my *Fact and Fable in Psychology* (1900); see also pp. 238–275.

tice seemed able to dispense with them, but really assumed them. Thus fortified, but ignoring the source of its equipment, practice proceeded, as well it might, to extend its domain and to claim its mighty conquests as exclusively its own. It grew proud of its power and naturally attracted the larger following. Practice is, indeed, quite capable of self-direction so long as it remains fairly close to a well-trodden domain; but at the frontier, where the next step is uncertain and ventures into the unknown, theory holds the larger vision and the more capable direction.

Once education has become a democratic birthright, it is inevitably limited for the vast majority to the point at which it fits one for performance of the simpler parts in the social economy. A livelihood must be gained, and learning comes to be appraised by the "paying" quality of its gifts. Such pragmatic test may be as rigidly applied to theory as to practice, but when applied to the study of principles has a more catholic criterion. The man of science appreciates how indirect may be the road from theory to practice and how vain are short-cuts as well as royal roads to learning. The democratic temper is apt to be impatient of such precautions, and to ignore what is not patent on the surface, apt to insist upon immediate results and to become suspicious of broad foundations, when the details and specifications of the structure to be erected upon them cannot be supplied.

But the peculiarly ominous feature of the democratic rule is that, with its freer distribution of opportunities, "practical" men come into influential positions, and establish alike the standards of approved success

and the power to enforce them. Political control and economic control set the patterns for control in general; and any claim for exemption on the part of education from the tests thus established is cavalierly dismissed as a specious mask for incompetence. While still regarded as indispensable, education finds its hands tied by an alien rule, which may be kindly but undiscriminating, but is quite as likely to be self-confident and intolerant. Thus transfigured, the democratic suspicion of education is the strangely habited successor of the distrust of the learned arts. In some quarters disavowing the rôle, in others proud of it, the champions of the practical life become difficult opponents because of their entrenched positions and their dislike or disdain for argument when conclusions can be more simply determined by force. Stated with the pardonable brusqueness that results from a rough sketch, such is the controversial contention that is selected for consideration, because its very existence is so commonly ignored, either in complacent satisfaction with the *status quo*, or resignation to it, or in an unwillingness to agitate with uncertain profit, and face the possibility of arousing a more aggressive distrust.

I

Among the professed convictions of democracy none is more readily urged than the belief in education. All adherents, whatever their partisan political affiliations, eagerly espouse its cause, as similarly all nations profess the cause of peace. But the type of education and the conditions under which it shall proceed, like

the conditions under which nations will keep the peace, are matters of serious contention. For education as for peace the critical issue is the placing of that control; for education the actual conflict is between the several orders of interest contending for a share in the social control.

Education is at once respected and suspected; for education protects the past, even as it secures or mortgages the future. It faces the task of reconciling the older and the newer order, of making the transition from one to the other. In a brisk democratic climate, education, if it takes its clue too largely from precedent, becomes dull and forbidding to the sturdy progressives; if it caters too eagerly to the ambitious haste of the young and untried, it loses poise and prestige. The situation, however, is not so simple, either in fact or in statement.

The parties to the suspicion of education are not readily summoned. It is only occasionally, when the freedom of speech and action is at stake, that the issue comes to trial. The ancient form of the conflict was direct and militant, and promptly raised the cry of heresy. From charges of heresy to modern indulgent tolerance, the change of front is decided. In the old-time régime the professor was assumed to be safely orthodox. Any deviations from the prescribed path were sharply checked by a superior of his own guild. In the present order his calling approaches that of an accredited pathfinder; if his right of dispensation is questioned, it is he who reads the law of trespass upon academic freedom. Yet the two expressions are one in motive and akin in circumstance. The professor in

the land of the free — if he remembers that it is also the home of the brave — may attain a democratic variety of liberty. If he is moderately vertebrate, decently considerate, and properly practical, he enjoys the freedom of the forum as well as of the academy. But restrictions, however themselves restrained, are at work; they may not gall, but they chafe. The man of ideas is not gagged or muzzled, but tethered. The stake is shifted to pastures new when the powers that be decide to extend the boundaries of what it is safe for the public to know. The restraint handicaps the profession as it limits its public service. It is not austere, dogmatic, or ceremonial, because these forms of expression are uncongenial to a modern platform. Yet the suspicion of education remains; the voice is Jacob's voice, but the hands are the hands of Esau.

In our up-to-date democracy it is not the dead hand of the past that stills the voice of the scholar or saps the vitality of his utterance, but the mailed fist of the present. The fear or the complaint is not that the learned tribe are going too fast in tearing up the old, but that they are presumptuously interfering with the new. The distrust is a pragmatic tribute to learning, in that it assumes that what is taught in the academy has its effect in the market-place. Suspicion is aroused only when real or cherished values are threatened; these vary with the changing rallying-points of worldly interests.

The shifting lines of conservative protest are suggestive. The sciences and philosophies that deal with man — his origin, his nature, his obligations, his destiny — invite the suspicion of learning. What the people believe on these matters profoundly affects their

conduct, and may disturb the established institutions that assert a control of such conduct. Beyond this range, feeling does not run high because interest is remote. We must go back a generation or two in time and a longer span in ideas, to find an heretical suspicion of geology, for example. To our retrospect it seems a crude loyalty to the Biblical prestige and an insensitiveness to the ethnological quality of the story of creation, that looked upon the geological account as a rival. The attitude toward inquiry that entertained the suspicion is substantially obsolete. In the absence of any sanctified chemistry or physics — apart from certain aspects of miracles — these sciences escaped the heretical implication; but they did not escape the oppressive, inhospitable, ghetto-like atmosphere of suspicion in which all science had so long to live. Astronomy was less fortunate in that the earth was the human habitat, and the cosmic system the center of all speculation. Such considerations are significant. As a fact, it made no difference to the ordinary citizen whether he believed in the Ptolemaic or the Copernican system, except as authority stepped in and saw to it that he should be let alone in the one case and suitably harassed in the other. But what always made a difference was whether the citizen was acquiescent and conforming or not, and from whom he took his orders — the crucial issue of the social control. To tolerate indiscriminate inquiry or condone skepticism is an invitation to anarchy; no one can tell where it will stop.

It becomes apparent that the suspicion of education centers about the knowledge-sources of human control

and moves with the shifting center of the established institutional interests. In long cultural sweeps it shifts from Church to State; within the State from absolute authority to mobilized partisanship, from politics to commerce, from one system of fused and composite interests to another. The democratic suspicion of education is the dominant one in American affairs. It grows out of the complications of theory and practice in a highly organized, industrialized community. The constructive instincts are bigger and older than the intellectual ones. The native human fitness is for doing things; changing the face of nature is the human specialty. The cult of the hand is more universal than the cult of the head. The practically occupied part of humanity is always the vast majority; the intelligence of the practical understanding sets the standards of intelligence in all respects and the perspective of interests yet more conclusively.

Biologically, it may be noted, man's only formidable weapons are his wits. In his early career he outwitted his animal competitors; and the game of life persists as a complicated endeavor to outwit one's human competitors. It is natural that beyond the point of immediate guidance of action, the pursuit of knowledge should seem a vanity or a luxury. To the many it is such; to the few, not. That ridge forms the great divide, and eventually estranges the few who live by thinking, in a world of ideas, from the many who live by doing, in a world of action. The public function of education is to reconcile the estrangement, to bring the two camps together.

It is a sobering consideration that the carrying of

thinking beyond the stress of the urgent or the imminent situation is in truth an unnatural process; but also that such is the inexorable demand of the artificial life. The complimentary designation *homo sapiens* applies feebly to the race at large. To the unsophisticated mind, getting results by thinking seems a weird, uncanny process. Letters and formulæ are charms, and the laboratory a witches' caldron. Necessity is the only accredited mother of invention; and, by the same token, laziness must be its father, since labor-saving devices are the common features of the progeny. Yet that incidental by-product of the problem-solving impulse through which was distributed irregularly among men a liking of the thought-adventure and a joy in the mental quest, has proved to be the most momentous factor in human evolution. Little wonder that genius stands aloof and anomalous, commanding awe and suspicion, and that a like suspicion attaches to all practitioners of the thinking arts, black and white, ancient and modern.

With such an heredity the present-day suspicion of education becomes more intelligible. But present-day conditions seem peculiarly fitted to dispose of the suspicion finally. There is so much intermingled, complicated knowing and doing for so many of us, that the intercourse between them is busy and regulated. The portals of learning are thrown wide open. A university is democratically defined as an opportunity for anybody to learn anything. The cult of learning has no longer any hallowed secrets or mystic rites. The democratic shift of affairs, reflecting the widespread organization of industry and the bigness of it in the

perspective of life, has swept the center of social control into the stream of the industrial traffic, and established the stock-exchange as the solar plexus of communal sensibility.

II

When the universities, both leading and following the political and industrial movement, incorporated the newer humanities into the curriculum, the democratic suspicion was inevitably concentrated upon these studies, as soon as they grew formidable enough to assert a direction of affairs. The big business of government rapidly became hugely complex, and had to be organized as much after the manner of studies as of office routine or industrial management. The methods of investigation and research were alone adequate to confer insight. The man trained in the school of experience occupied one side of the desk, and the man trained in the school of organized learning, the other. The suspicion of education still hovered near and erected an intangible barrier. The question of directive control was certain to become a critical issue.

The effect within the universities was marked. It weakened the waning hold of the older humanities, and in so far removed them from the zone of contention toward the neutral territory of the harmless and the useless; it also altered the trend and temper of inquiry throughout the institution. This movement proceeded with safety and sanity in the European universities by reason of the firm establishment of the rights and dignities of learning and the accredited share of trained thinking in the equipment for leadership. In the

American universities the parallel conservative tendencies were negligibly weak or had a different setting. In the older institutions of the Atlantic seaboard, endowed by the loyalties of private patrons and serving the interests of the spirit, somewhat locally interpreted, for several generations of homogeneous communities, the adjustment was gradual. In the receding frontiers where territorial and industrial expansion was rapid, governmental regulations provisional, situations urgent, different solutions of public interests had to be found. In that environment any desirable citizen, and many an undesirable one, could be elected or appointed upon qualifications moderately unrelated to the function to be served, and proceed in office after the manner of a man of action. The tradition of the respectability and the steadying power of learning was not lost; each new State established its university almost as soon as its capital. The educational institutions accepted the conditions and such limited support as they made possible, and prospered in varying measure. The rest is a matter of rapid history. The distinctive and comprehensive fact is that the establishment after their manner — in itself quite unprecedented — of the American State Universities presented to the interested, and at times amazed world, the reaction of thorough-going and untraditional democracy to the perplexing claims of learning.

The primary effect of the contact was obvious. Democracy raised the criterion of utility, which was legitimate, and insisted upon prescribing the instruments of its attainment, which was questionable. The banishment of the classical inutilities was simple; the Greeks

had little to offer on facilities of transportation. The contentious question of the value of studies may be side-stepped; but the question of the value of trained thinking is vital. To the loyal steward of learning, whatever contributes to that end is precious. The democratic steam-roller is not a delicate or a considerate leveling instrument. Education emerges from the operation maimed rather than rectified. The practical criterion is derived too narrowly from a limited and insistent world of experience; its harsh and undiscriminating intrusion distorts the pursuits of learning and disturbs its temper. Feebly supported by tradition, coerced into immediate responsiveness to local pressure, controlled by external and inevitably unintelligent authority, the State University is bound to compromise such aspirations and ideals as survive. Toward the activities of the University the practical control dispensed with irregular bounty three policies: encouragement, indifference, suspicion. The immediately and aggressively practical was encouraged; the traditional and well-established mainstays of learning were tolerated, possibly damned with faint praise, possibly permitted to decline by inanition; the newer studies, with close bearing upon politics and business, were pastured and watched. But back of all and most vital was the manner of regulation. Meanwhile the Universities grew, the catalogue swelled, the students flocked, the budget waxed apace.

III

The phenomenal and triumphant march of the higher education in the United States during the last

half-century may be viewed as the visible embodiment of the democratic faith in education as the only adequate preparation for the modern life. The scale of the demonstration, and the measure and manner of conviction which it embodies, are apt to escape the attention of those to whom the phenomenon is familiar. It may appear if one considers that presumably for the first time in history has the control of the vital concerns of education fallen to the direction of the people at large. This is the result of the spread of democracy, which is one with the spread of education, and of the consequent interest in the educational provisions and the equally consequent desire (considering the dominant democratic political temper) to exercise control over it. Only when the mass of the people were in creditable measure educated — or at least the possibility of such education stood close to everybody's horizon — could such a situation develop. It has developed most typically in the United States by reason of the extensive opportunity and intensive assertion of the democratic régime; and it appears in the fullness of its implications in the growth and expansion, as likewise in the manner of control, of the State University. The consideration applies to the entire educational system, but to the University peculiarly. For the student of the convictions underlying education as a great social institution, the manner in which the democratic genius has disposed of the distribution of control is of commanding interest. It is not a matter of limited professional concern, least of all is it an academic question in the uncomplimentary barren sense of discussion without issue; it is a vital issue in

public policy. Though a democracy may treat education niggardly, and ignore the appalling fact that the cost of one battleship will pay for the building and equipment of a great university or endow a small college, the educational budget and the educational activities form a conspicuous feature even in an ungenerous provision.

Turning to this most practical aspect, we note that in regard to the State University, the voting of the sinews of war is a legislative function, and thus definitely places the control of education with the layman. On this matter there must be no illusion; the result is not inevitable, but merely actual; for the democratic position is decided. The notion that those who dance must pay the piper is universal; the notion that those who pay the piper shall say what and how he shall play is democratic. In such measure the box-receipts control the career of the drama and the advertising columns the editorial pages, — all crude statements, but in this application not libelous. Next must be discarded the academic delusion that by adoption of policy one may put asunder what by institutional bond goes together. Boards of Trustees or Regents may solemnly record that educational questions rest with the Faculty and financial ones with the Board; but both are parties to self-deception if they believe that the resolution affects the facts. Under the actual government the real situation is that questions which the Board is willing to leave to the Faculty define the latter's province; and such decisions as the Legislature is willing to leave to the Board determine the orbit of its powers. The determination of control, within the college walls and without, is of one complexion.

In the machinery for the regulation of the State Universities, the democratic suspicion of education has an unprecedented opportunity to reveal its existence and its quality. Here the student of education, with a taste for diagnosis, finds the tale-telling symptoms. Of the first order of significance is the transfer of the policy and spirit of the practical life to the academic economy. The germ responsible for the most acute symptom is that insidious bacterial agency known as "efficiency." The expansion of business, including the business of government, has developed a technique of its own; through its mastery was to be secured the largest share of social control. The business technique, and still more disastrously the business attitude, comes into sharp and direct conflict with the scholarly temper and disinterested habit of mind of the inquirer. The one criterion is tangible and intelligible; the other, intangible, uncertain, and difficult. The practical man's control advances or implies or imposes the view that the same methods that bring success in business must apply and have like value in education. The University "plant" must be weighed and surveyed, and if found wanting, Dr. Efficiency will prescribe. The rating of the student-factory is to be judged by its output. Time-slips and unit-costs tell all the story that a busy man has time to consider. The professor fills out a tediously complete question-sheet, and a clerk tabulates just what he is worth. Those who have followed the situation know that this is not an exaggeration or a travesty, but in at least one instance an under-statement of the crude attempt under legislative warrant to apply an irrelevant appraisal to a great University's

activity. This may be paralleled in another instance by the wanton disregard of intellectual interests through the autocratic withholding of the University's appropriations by the Governor of the State. In the latter case the danger of power in unintelligent hands, as of the possible fate of learning under political handling, is drastically illustrated; in the former case, the danger of carrying a totally unsuitable method of appraisal to the extreme of an obsession. In both instances the motive force is the insistence upon a practical standard, with the consequent suspicion of sound learning not immediately translatable into commercially negotiable terms. In both instances the most obvious and essential of practical policies, that of providing every worthy enterprise with the conditions favorable to its finest possibilities, is grossly disregarded. When education is appraised by irrelevant standards, its cause, however attentively listened to, fails to get a hearing. The pleading and the defense come to assume the arguments acceptable to the business mind. The triumphs of science are quoted as increasing dividends obtained by conversion of the baser metal of inquiry into the gold of application. Under cover of such benefit, charity is solicited for the poor relations of the educational household. Morganatic alliances of culture and agriculture are entered into to secure the interests of the future. Defend, excuse, condone, regret, bewail or censure the situation as one's conscience or one's temperament decides; but let it not be ignored. Such are the controlling factors of the interests of education under democratic control.

Perhaps the strangest manifestation of the demo-

cratic suspicion of education is the complaint that the educational interests do not remain free from the taint of political influence which democracy has itself imposed. Common and loud is the cry that the State University is "in politics." Forced by its constitution to be a political dependency, pricked into an alert responsiveness to public pressure, unprotected by an adequate bill of rights or permanence of policy, exposed to inquisitive periodical digging-up of such roots as get a start in the meager soil, how shall it be otherwise? The educational present is no sooner liberated by favorable or complacent measures than the future becomes uncertain by a turn of political fortune. Politics makes strange bedfellows, and the State University is called to account for the character of its involuntary associates. It is not only possible, but supremely easy, to free the State University of all undesirable political affiliations. A single measure properly framed would secure adequate financial support and legal security. But that would diminish the external control and give the directive policy to those professionally qualified to exercise it; and there's the rub, for the democratic suspicion of education will not have it so.

To acquit the Universities of all accountability for the unfortunate situation would disclose an academic bias. For the most part the Universities have played the game with little or no protest at all. They have consented to make it a game. Many a worthy University president has entered the office as a scholar and left it as a politician. Some have not the original handicap to overcome. Some entertain the imperial

ambition to leave in marble what they found in brick. Others give due consideration to the principle that a university is composed of men. And thus we reach the indiscreet question: Who is (or who are) the University? On this issue one may be as neutral as the Sphinx and as politic as the University president, and yet recognize that for the suspicion of education, the University is the Faculty. No legal disfranchisement conceals the true relation. The professor in his unprotesting timidity may be dubbed the "third sex"; but the unerring test, with the truth of psychological revelation, leads to the actual source of influence. By following the trail of suspicion one reaches the knowledge of the scholar and discloses the fear of trained thinking.

IV

It is well to carry diagnosis a little farther and observe how the men of knowledge and the men of action come to clash. Application needs no defense, and speculation to be profitable must be kept within bounds. The divorce of thinking from the vitality of fact and the experienced habit of mind leads to refined but inconsequential rumination. The scholastic sterility is the historical justification of the suspicion of education; but for the American situation it is as remote as the accusation of witchcraft. The lines of conflict are assembled about the standards by which utility is to be judged. The practical mind in this aspect of its operation is strangely blind or inconsistent. The charge may be made respectfully, for it is recognized that all men except fools have their irrational sides. The prac-

tical mind appreciates the benefits of science, its recent gifts especially. The telegraph, telephone, electric light, motors, and automobiles are indispensable to business. A vote of thanks is in order; but there the matter ends. Of the intellectual supports of science, the depths of its foundations, the immensity of its scope, of the world and the life which it expresses and the consecration which it imposes, there are but vague notions. The notion approaches definiteness in the suspicion that a demand for a favorable scientific atmosphere is a clever but specious plea, whose real purpose is to extract uncontrolled appropriations and secure immunity from investigation. Deliver the goods, and to those who have shall be given.

The practical emphasis is legitimate just so far as it is intelligent. But the source of insight is the hidden spring from which all blessings flow, and which, like all springs, will run dry unless constantly replenished. The effect of unintelligent democratic practicality is composite. It encourages the equalizing education, and makes a pet of university extension and all that may be spread widely and thinly. The recognition or cultivation of superior fitness is viewed with suspicion. Learning is necessary, even admirable, so long as it serves. Learn all there is to know, but bring the learning to the practical man, and let him direct its employment. Those who come with unprofitable accumulations or with empty hands have only themselves or the system of education to blame. The expert, like the laborer, is worthy of his hire and no more; and to be thus worthy, he must perform a desired and a prescribed service. The twentieth-century expansion of

industry and government requires the services of trained thinking in systems of taxation and transportation, in regulation of natural resources and public utilities. The employment of the trained thinker is one matter; his investure with authority quite another. As a clerk to a business-minded commissioner he is acceptable, but as a commissioner, questionable. The brunt of the suspicion goes back to the University of which he is a product, and which sets his affiliations. To the politically minded, affiliation is always of a political cast. The scholar in public service belongs to the University Party; and party politics is a ruthless struggle for social control. The State University is urged by the practical turn of the democratic institution to apply its resources to the problems of the day and the hour, and by the very thoroughness with which it accepts the obligation, it arouses the suspicion of its service. "Serve, but do not aspire to control," would be a suitable motto for its portals, if peace at any price were its policy. "Let thy knowledge be another's power," is a proper text for a baccalaureate sermon that seeks democratic approval.

V

The suspicion of education has another and a most significant aspect. Regulation and control are means; the satisfaction of needs is an end. Between the two, morality steps in and justifies or denounces means and ends. Conflict of policy is serious; conflict of motive even more so. The regulation of public good and private advantage is the oldest political problem, but not older than the moral principles by which it alone can

be safely and sanely solved. The enduring temptation is to use the political machinery for private interests. Lobbyists range from philanthropists to scoundrels. The back-door channels of influence, secret understandings, bartering of measure for measure, extend the mechanism of control deviously and dubiously. Despite distressful exceptions, the party of the larger knowledge has been the party of the firmer righteousness. A sensitiveness to the intellectual values, if education is permitted to express its inherent quality, sensitizes to moral values as well. Times alter expression; but the custody of learning does not lose its priestly function. Were this not so, a university might degenerate to a training-school for "crooks." The atmosphere of ideas and ideals is one. In it must flourish such measure of disinterested endeavor as is compatible with a rigorous democratic climate.

The political suspicion of education thus acquires an added motive. To interpret the implication crudely would be unjust; to ignore it is misleading. The sins of society grow with its complexity and rise with its level. The standards of propriety that divide men are delicate and involved. Compromises which one man sanctions and another condemns are not black but variously shaded. It is altogether too true that the standards congenial to the political habit of mind, with its short-sighted vision focused upon immediate advantage, leave convictions forlorn and principles "all tattered and torn." To make the worse appear the better cause is the ancient temptation of the battle of wits. Hypocrites, demagogues, "confidence men," artful dodgers and copious shufflers, all shades and

grades of frauds, persist among men and prove the moral neutrality of heredity. These engaging qualities in their modern guise appear less as vices than as failings; they are toned down to the manners of respectability, but the disguise is often as crude as the underlying quality. You cannot wholly avoid them by joining University Clubs; and to their shame, the University's graduates have not always proved its truest knight-defenders in the political jousts. An insensibility to intellectual values and to moral distinctions alike contribute to a suspicion of education. The upholders of the broader learning, as of the finer integrity, will continue to love the cause of education for the enemies she makes.

It should not be overlooked that in developing its position, the democratic suspicion of learning has improvised an educational platform. The democratic view sets forth that as one man is as good as another, or at least no better, so is one study as fit as another. Education has no center and an accommodating periphery. This convenient theory finds defenders within the University, possibly as a comforting echo of the sentiment without. If students find difficulties in entrance requirements, whittle away the requirements, and graduate candidates upon terms which they can conveniently meet. The increasing number of college graduates may always be pointed to to prove the growing enlightenment of the State. If a man is not equal to his task, adjust the task to the man, or accept what he can do. By eliminating quality the world is wonderfully simplified, the academic world especially. Consequences multiply. Those within the University

who yield to the popular clamor attract the elective affinities of the student, and more and more set the standard of presentation and performance. Injection of the practical motive doubles the attendance of the complacent professor's courses; and, however resisted by the professors more loyal to ideals, by such returns is their academic status affected. Foundations are slighted, engaging but uncritical interpretations sponsored, half-baked theories advanced, and equally indigestible conclusions swallowed. The process has gone on long enough to affect the quality of the recruits to the learned career. The rewards of practice attract, and the disqualifications of the learned profession repel. The selection is lowered, and enough of the weaker sort enter the Faculties to give unwelcome support to the contention of the practical men that the professional man is no better equipped for responsibility than any one else. Too frequently insecure in professional virility, the practical aspirant for preferment finds it easier to impress the layman than the judgment of his peers. The suspicion of education lowers the professional standard alike of learning and of learners.

Such is the true if unpopular story of the educational situation. The text and its elaboration may not be suitable for a congratulatory Commencement address. To the serious and sincere it induces reflection, perhaps dejection; but despondency is largely temperamental; hope and despair commonly enjoy the same outlook. There is no question that theory and practice will continue in business together. The warrant for the decline of the fear of trained thinking lies in the fact that the political and the industrial expansion

demand it; the larger experience will restore the truer perspective and the broader sympathy. The movement in that direction, by the inertia of the masses concerned, is slow and irregular. Under the banner of Efficiency men may proceed jauntily to brief and startling reform; under the same misleading ensign the reaction from its disappointments, sincere or feigned, will proceed to a stronger entrenchment of the practical man and a withdrawal of such favor to the cause of new learning as new movements dispense. The effect seems to be the substitution of an indiscriminate for a partial suspicion of learning.

Yet it would be neither fair nor wise to conclude with this despairing note. It is well to consider that matters might be worse. There are more menacing dangers to the cause of education than a democratic suspicion, there is an autocratic control. Of this the saddest example that the modern world has discovered to its dismay, is furnished by the educational system that American institutions have copied with greatest respect. The world war has revealed the extent to which the positions and preferments of professors in German Universities is determined by complacent agreement with governmental policies. Such conformity has gone to the extent of shaping doctrine to support the policies of those in power and supplying them with the prostituted sanction of learning. Such a condition subjects the freedom of teaching, not to suspicion or limitation, but to a perversion worse than any possible encroachment by unwise distribution of control. Under this startling revelation the cause of academic freedom has assumed an international im-

portance. It makes clearer to democratic institutions the sanctity of educational ideals and gives the intellectual interests a clearer share in the safeguarding of democracy. Learning must be free, not alone to direct practice wisely, but to perform its service for the commonwealth; such service consists in the command of scientific principles which is the warrant of the expert, and the loyalty to moral principles which in considerable measure are likewise under the priestly custody of the disciples of learning. With the danger of an unwise control of educational interests thus dismally revealed, the truly practical man, the broadly practical man, will more readily appreciate the importance of abandoning his suspicion and yielding to the professional guardians of learning a far larger and more authoritative control than is now exercised. No profession can maintain itself or its ideals, can attract to its calling the finest minds, that does not control the standards of its guild and command the confidence of the public. The indispensable step toward such an issue in a democratic nation is to dismiss the suspicion of education as an obsolete heritage from an unenlightened past. Conviction must precede reform; a survey of the forces shaping such conviction may serve as an approach to a more fortunate understanding.

IX

THE PSYCHOLOGY OF INDULGENCE: ALCOHOL AND TOBACCO

For presenting a controversial issue in which the voice of psychology may be heard, the question of indulgence, more particularly the "case" of alcohol and tobacco, presents many advantages as well as perplexities. It is a question upon which persons of comparable intellectual and social status, of like concern for matters of morality and of health, of similar outlook and education, hold divergent and even strenuously opposed convictions. The problem presents widely varying aspects in different countries, under different traditions, which in turn are reflected in the mode of regulation of these indulgences, in the social customs surrounding their use, and particularly in the attitude assumed toward them by the prevalent public opinion. These varieties and contrasts are the issue of the cumulative historical forces that always shape modes and standards of living. Other days, other ways; from one generation to another, under special stress of circumstance and in response to an alert social conscience, views change moderately or decidedly. In addition, the scientific decision in regard to the effect of alcohol and tobacco turns upon technical investigations in physiology and medicine, involving difficult and intricate interpretation. Moreover, a definite stand in the matter is not easily avoided, alike in theory and

in practice. The situation invites if it does not compel a positive attitude and decision. The question of the regulation of such indulgences is certain to become a public concern, and may become an acute political issue. Public sentiment and public opinion determine personal attitudes narrowly or liberally; very different atmospheres surround the indulgences, leaning toward approval, or tolerance, or indifference, or condemnation, or uncompromising animosity. Politically these may assume a local, or a provincial, or a national importance. Such movements at times gain a favorable and rapid headway, and again are treated complacently or with slight concern. In a disinterested view the attempt in the United States to establish a political party on the question of regulating by prohibiting the traffic in alcohol, is an amazing anomaly. If party organizations were generally carried on in this spirit, there would arise as many parties as there are planks in a platform; and the problem of securing a democratic expression of opinion would become even more hopelessly complicated than it now is. Though it may be formulated politically, the liquor question is considered morally. It inspires violent harangue as well as sober condemnation. In some quarters it is presented as the most serious menace to civilization; and the thousands of wrecked lives and unhappy homes traceable to the liquor habit form the tragic and indisputable evidence of the gravity of the problem. Though so nearly equally controlled by moral, hygienic, social, and practical considerations, it is in the main the moral aspects that shape the contours of the issue; in this respect legislation follows public sentiment or yields to

it. The practical side is represented by the question of extravagance and the obstacle to thrift, and by the economic effect upon the efficiency and reliability of labor. Irregular living, diminished returns, enfeebled energies, stand as the charge when the "case" of alcohol is called.

For all these reasons the attitude toward the use of alcohol, and in lesser measure — thus serving as a helpful comparison — toward the use of tobacco, may profitably be considered as types of complex convictions. The larger bearings of the regulation of these indulgences are not here to be considered; our concern is only with the forces that shape convictions and attitudes. In this view alcohol and tobacco become "cases" of indulgence; for psychologically that is the larger aspect — not necessarily the more important aspect — that includes them. Under these limitations the manner of formation, and in some measure the justification of convictions, is made central and determines what shall be included in and what omitted from the present survey. Obviously the pros and cons of statistical data, of technical investigation, and of political situations belong to other domains; as do also the policies to be reached and made effective after due consideration of all sides and interests. Of large bearing upon such decision, however reached or whatever its complexion, is the general principle that the practical setting of the indulgence — which is a matter of the attitude toward it, and thus fundamentally psychological — itself determines the moral and mannerly side of it, and through these the measure and nature of the abuse and the consequent evils. As un-

questionably established as the evils of intemperance and the menace of unwise indulgence (all with reference to one's temperament and surroundings) is the psychological fact that the influences attaching to such indulgence can go far to reduce or to aggravate the dangers, to give the indulgence a favorable or unfavorable setting. The American saloon and the manner in which liquor is used, and the occasions and associations of the drink-habit, may have more to do with the evils of alcohol than its intrinsic and inherent menace. The environment of the potation may be more decisive than the alcoholic ingredient. And this means that the problem must be considered discriminatingly; the discrimination must extend to details and circumstances, alike physiological, psychological, and more generally social. Even the percentage of alcohol, which represents the strength of the craving, — whether for brief, strong, violent stimulation, or for leisurely, convivial, moderate easement, — may be the determining factor that directs the indulgence to restraint and an innocent sociability, or degrades it to *abandon* and irresponsibility. For tobacco the parallel alternative may be between using the weed for solace and the symbol of leisure, or for excitation and relief of tension during intensive work. In all this apparent detachment there is no intention to ignore other and practically more important aspects of the "case" of alcohol and tobacco. The set limitations of the essay imply a familiarity with such other bearings, in order to make way for a treatment on a larger scale, of the special psychological considerations that are so easily overlooked. The psychologist, like every other specialist,

finds in a common problem the material for his special interests and interpretation. In so far as he sets himself the troubled task of illustrating in terms of the psychology of indulgence, the general manner in which controversial attitudes are shaped, he must face the consequences of his venture. He may be content if he carries the conviction of the pertinence of his approach, whether there is acceptance or rejection of his conclusions.

I

It is conceded that, by and large, the affairs of the body affect the business of the mind, that substantially every physiological adjustment involves a psychological one. When the effect is carried primarily through the nervous system, the relation may be affirmed unreservedly. Such direction of the joint affairs of body and mind regularly assumes a moral aspect, readily makes demand for economic regulation, and may appear militantly in political policies, or give rise to a complex social problem in a problem-conscious age. In the hue and cry against the use of tobacco and alcohol — in excess a serious social evil — are raised many voices of denunciation. The clamor is loud but confused; for the cause, like other causes, makes strange bedfellows. Extravagant tirade, a noisy campaign cry of extermination, high-pitched moral concern, lusty prejudice, sanctimonious preachment, sober judgment, political hubbub, contribute to the Babel of tongues. In such an issue where passions, though of milder partisan temper, are engaged, a broad reasonableness of view makes for poise and sanity and

tolerance alike. The present essay presents the conviction that a consideration of the psychology of indulgence may promote a helpful attitude toward an admittedly controversial issue.

A college student, after a patient trial of the somewhat strange menu of a "health" restaurant, came to the reasonable conclusion that there was no substitute for food. To this we may agree, and agree as well that it behooves us to exercise discretion in regard to what shall pass the lips and sustain our being. Such is the dispensation of nature that links in close sympathy digestion and disposition. It is, however, not altogether a simple matter to distinguish between foods and stimulants, and aids to digestion; for these are of many varieties and in their effect encounter a complex physiology, are subject to the individual susceptibility that proverbially makes one man's meat another's poison. When the chemistry of nutrition and the physiology of digestion have had their say and have been duly heeded, the food problem is not disposed of, at least not in the case of the more complexly organized members of the species, to whom consideration may be directed. It begins as the relatively simple problem of feeding, and presently assumes the composite complexion of dining; and the diner, with no exemption from the primitive satisfaction of universal needs, is none the less a social, æsthetic, moral, and intellectual being capable and desirous of a generous round of as worthy (or, at least, as innocent) gratifications as his endowments, tastes, and circumstances may afford. He wishes to participate in the enjoyments of good, and likewise of sound living.

That the pleasures of the table play some proper part in the art of living, and contribute effectively if modestly to the formation of standards and levels of culture, is abundantly attested by the tried and approved customs of many sorts and conditions of society. Hospitality is an ancient virtue and an abiding one. Goodfellowship, the widening of sympathies and outlooks, the stimulations of intercourse and temperate discussion of the affairs of state or philosophy are promoted by the companionship of the table. A German saying, by a play of words, sets forth that a man *is* what he *eats;* it would be truer to say that how a man eats is a clue to his nature. At all events, the ceremonies of the repast and table-manners come to serve as a critical index of refinement. Psychologically, the transformation from feeding to dining is a convincing example of the evolution by which the exercise of a natural function acquires a worthy social status by surrounding it with the several embellishments available to an æsthetic nature. Released from the grosser claims of urgent hunger and absorption in the cruder sensory stimulations, we add to physiological appetite — ever the best because the natural sauce — supplementary allurements of spice, garnishing, flavor, setting, and such arts of gastronomy as we command. In thus elevating a necessity to a function, we are ever appealing to the more delicate, and are subordinating the grosser satisfactions. Nor need we become heedless of the superior injunction of plain living and high thinking enjoined by our moral nature, that in turn subordinates the dinner to the diners. The quality of the former can never atone for any notable defections

in the qualities of the latter. Yet to attain the reputation of a welcome dinner guest and to participate worthily in the communion that ministers to daily needs is an attainment not to be slighted. The cultivation of the zests of life, of the alleviations of the day's sterner occupations, presents a claim that cannot be denied without losing something of the fullness of living. It is true with more than one reference that man does not live by bread alone.

The appreciation thus defended, itself makes for moderation. It sets forth the service of the seasonings and garnishings, and by that token does not mistake them for the solid ingredients of the courses themselves. It allies itself with the amenities, the luxuries, the leisure, and the surplusage of life, from which many choice blossoms emanate; it contributes the order of gratification that tends to advance the standards of living. It does not depreciate abuse nor become unmindful of temptation; the very presence of tempered restraint is part of the flavor. Such appreciation may properly point with disfavor to the neglect of that which it cherishes, to bemoan the scant place accorded to its interests in a recklessly busy occupation, snatching hasty bites at "quick-lunch" counters, tolerant of bad cooking, insensible to the unsavoriness of a rushing or a mussy existence. If the cultivation of standards of good living be our aim, it seems reasonable to enlist in the cause all the various aids of high and low degree, that may contribute to the common end; nor need we fear, if we have any confidence in the stability of our individual, social, or national character, that the presence of restrained indulgence

will mar the perspective and detract from the higher, by attention to the lower satisfactions, or by exposure to temptation endanger the power of resistance. Manliness is to be and often must be trusted as well as sheltered; and by the very confidence that we express in self-control, we pay tribute to its worth. Ideals need not suffer in their pragmatic contact with the convincing realities of our many-sided nature, responsive to the versatile appeals of a many-sided world. It is rather in our skill in making the conventions of society the instruments of worthy purposes that we show our quality and attain the full stature of a privileged humanity.

II

All this may seem an ambitious, even an irrelevant prelude to quite too slight a theme to sustain it. Yet the argument is of one nature; the keynote is that of the psychology of indulgence. Men will look very differently upon the place that may properly be provided or sanctioned for such indulgences as alcohol and tobacco, according to their views of indulgence in general, of the legitimate demand to be conceded to cravings that stand close to vital needs, and by such intimacy incur the danger of disturbing the general economy. Men will be judged by the direction of choice and desire — guided by morals, manners, and ideals — among the varieties of indulgence afforded by the democracy of common opportunity or the aristocracy of special privilege. That the glass of wine at the table and the cigar after it have come to take their part in the scheme of indulgent gratification that promotes

fellowship, and in such social service, under the usual sanctions and restrictions of convention, have served their purpose well, may be advanced with quite as much warmth and pertinence as has inspired the fierce and undiscriminating denunciations that recognize only the serious evils of intoxication and an intemperate tobacco habit. It will ever remain the case that for this or that individual or group, in consideration of the dangers to which the use of alcohol and tobacco is undeniably open, the only safe and the only wise policy is that of abstinence; but if we are prepared to guide policy by knowledge and reason, it is but fair that the several aspects of the problem, alike for principle and for practice, be considered together and without prejudice.

A comprehensive antipathy to alcohol and tobacco is expressed in the verdict that places them in the index expurgatorium of drugs, and speaks of the indulgence in their use, however moderate or occasional, as a drug-habit. It allies them with cocaine, morphine, opium, and similar psychic poisons, and once reaching the term "poison" has seemingly proved its case. This is certainly a striking example of the danger inherent in assuming an intolerant attitude toward a practice admittedly open to serious danger in its abuse; it also illustrates that such danger is not theoretical but woefully real in the American situation and temperament. In this aspect it is akin to the similarly expressed extreme antagonism to the use of drugs in any form, for any purpose. The exponents of drugless healing illustrate the menace of conviction when it is undiscriminating in its premises and uncomprom-

ising in its conclusions. It is wrong — the argument goes — to administer drugs; for drugs are unnatural, and many of them are poisons. Cults, such as Christian Science and Dowie's Zionism, are inspired by such argument; and the appeal is ever to the obvious examples of excess, the victims of drug-habits that obsess and possess them to their undoing. Let children die through neglect of available treatment; let the pangs of disease and the tortures of injured tissues bring suffering to the full; let pestilence spread; but let us abjure drugs at whatever cost! It is entirely fair to adduce this amazing example of inhumanity fostered and advocated on the basis of just such type of undiscriminating prejudice as is often directed against other practices — admittedly, as in the case of tobacco or alcohol, with very different charges and quite different defense. It is fair, because only thus can one make plain the danger inherent in such attitudes, however worthy the motives or the causes in which they are enlisted. They make directly for unreason that is ever potentially vicious and dangerous. Whenever a campaign is inspired by the spirit of prejudice and unreason, the interests of sanity and sane regulation are jeopardized; every movement that conducts its enterprises by means of such appeals assails the rationality of the community and paves the way for fanaticism. It is reasonableness in all crises, as in lesser occasions of moment, that is the fundamental resource of wholesome judgment and policy, alike in hygiene, in morals, in politics, and the many controversial issues of public welfare.

One is tempted to go farther afield to illustrate the

menace of unreason as applied to problems concerning hygienic and moral measures that affect the rights of the individual and of society. Upon the basis of a similarly inspired opposition — and one quite as unintelligent — we have the anti-vaccinationists; and reaching to higher circles where prejudices, like other beliefs, acquire a more moralized statement, the anti-vivisectionists. It is gratifying to record that American conditions up to the present have not been as favorably disposed toward this propaganda of unreason as to others;[1] yet it is possible to cite the well-known fact that a popular periodical, which ministers to the relaxations of life and stands for that sanity of view which a sense of humor so notably confers, which circulates among the more cultivated classes of society, incessantly preaches an ignorant and false crusade,

[1] Since these words were written, the occasion for recalling them has arisen. The "Red Cross" has been sued by the anti-vivisectionists to prevent the use of one hundred thousand dollars appropriated by the War Council for medical research to relieve suffering and diminish the death-rate among war casualties of our own soldiers. A more amazing instance of the menace of intentional ignorance and obstinate prejudice is hardly imaginable. To insist upon a sentimental objection against experiments upon animals at such a critical time in the history of the nation, in brutal disregard of the facts and in impertinent opposition to the expert conviction of medical proof, is as preposterous as it is inhumane. To state that vivisection has brought no benefit to mankind in face of the overpowering evidence to the contrary, shows the utter blindness to evidence of a convinced sentimental prejudice; to urge that prejudice at this time and thus to cripple the humanitarian efforts that redeem the awful calamities of war, shows the complete disregard of humane considerations to which unreason may lead. In the face of this instance of bigoted opinion, the strictures above applied to it seem criminally lenient. Like the delusions of the insane — to which such fanaticism is allied — the distinction between innocent and dangerous beliefs is most treacherous. Society cannot afford an attitude of tolerance; the menace of extreme conviction is too serious.

brutally misrepresents the noble army of experts who are carrying the triumphs of science into the field of deepest concern to humane interests, criticizes without authority and ignores the open records of achievement; while in the main stultifying its own position, it unquestionably fosters the cause of prejudice. With such a flagrant example of a campaign of unreason circulating among those most favored in condition and education, it is well to proceed cautiously in all issues prone to arouse prejudice. It is, indeed, pertinent to observe that vivisection, vaccination, and the use of stimulants are essentially medical questions. This does not mean that physicians alone have the right to an opinion on the matter; it does mean that the same methods of scientific study must be applied to them as to all other problems in which the popular judgment must defer to the expert. Of the three, the vaccination question is clearly the most technical, the one in which a positive lay conviction in opposition to an established medical conclusion is most impertinent. Yet in this issue the method of prejudice loses none of its violence, is no more considerate of fact, than in more legitimately controversial matters, in which the nice adjustment of individual liberty and social welfare require a fair hearing of all interests.

All such issues revolve about the claims of sentiment as against reason. The proper appraisal of sentiment must be tactfully as well as charitably reached. The opposition to vivisection is more intelligible than that which inspires the anti-vaccinationists.[1] It rests

[1] It is familiar that the sentiment against dissection of the human body, reinforced by the authority of the Church, delayed for cen-

upon a sentiment that is cordially approved, but not as a principle to be followed at any price. In the view of humane men of science, vivisection is amply justified by the benefits which it confers upon the human race; to abandon it or even unduly restrict it would be a costly sacrifice to sentiment. The use of alcohol is obviously a more debatable matter, essentially a different order of issue, and reaches to the field of personal and social even more than of medical regulation. It is well, however, to consider related issues in order to appreciate the common psychology of their setting; to appreciate that the formation of conviction upon such issues is in each case affected by a decidedly similar play of forces. The perspective of consideration in all of them shows comparable factors; the wise decision of each proceeds by the same methods. In all, tolerance of divergent attitudes and the avoidance of fanatic convictions are indispensable. No one of these questions can be solved wisely, viewed sanely, regulated wholesomely, unless it is brought and kept well within the sphere of discussion dominated by a judicial temper, and subject, when pertinent, to expert, scientific judgment. That the same danger threatens the attitude toward the use of alcohol and tobacco appears in the legislation that requires textbooks for boys and girls to recite — often with a misleading emphasis and always with an unwholesome one — the shocking physiological consequences of over-indulgence in alco-

turies the advance of the basal medical sciences, even after these interests had been scientifically established. Although the force of proscription was more powerfully exercised in those days, and the objectors had a different sentimental background, it is clearly akin to that now operative in more restricted measure.

hol and tobacco, as a part of an elementary introduction to the principles of physiology. Such legislation is inspired by a propaganda conducted with mistaken zeal and persisted in despite the emphatic protest of experts in physiology and hygiene, as well as of the lay sponsors of sound teaching and sane views.

III

In the present survey it is not possible to consider in any adequate manner the findings of those who have calmly and scientifically investigated the effects of alcohol or tobacco, or to interpret their sober conclusions upon which alone a wise decision as to their mode of use or regulation can be based; or, again, to consider the economic regulation that the extensive traffic in these commodities demands. On these issues let those speak who speak with authority; and may they find a reasonable public to listen to their verdicts. The present concern is with the psychological influences that affect convictions in regard to the use of these indulgences, and determine the attitudes toward them, including the attitude of unremitting antagonism and uncompromising opposition.

It may be well to refer briefly to the judicial type of opposition, which is more likely to be met in the case of tobacco, because its use is looked upon more indulgently. Yet in sober statements we may read that the use of tobacco roughens or toughens the moral fiber, that smokers disregard the rights of others, that the habit is disgusting and will appear so if one thinks about it in the right way. The first type of statement will carry only when it is conceded that only the

wrong kind of people smoke; for it stands, not by proof of observation, but of prejudice quite as justifiable, doubtless as a predilection in favor of smoking and a preference for the custom and its associations. The æsthetic argument is sound; but it is interesting to observe to what uses it may be put. The same order of reflection that might induce one to give up smoking may also direct one's contemplation to the inherent unæsthetic character, the slimy nastiness, of a soft-boiled egg, so that ever after it will be a loathsome object. One might also bring to bear humanitarian considerations, and decide that it is wrong to interfere with natural embryological development and destroy life at its tenderest stage. It is perhaps easier to attain a yet more energetic sentiment against swallowing a raw oyster; but by thus breaking one's self of the habit of eating eggs or oysters by conjuring up an æsthetic prejudice against them, one has not demonstrated that the purpose was worthy or that eggs or oysters are unfit for food. The æsthetic argument is too uncertain; other people of respectable standing eat and relish such queer things. "Food" tabooes, as we know familiarly from the Mosaic dispensation, acquire a sanctity which in turn creates a violent disgust in presence of their violation. The same parent dispensation, the same historical stream of custom in which our attitudes have been developed, is quite as direct and strong in praise of the blessings of wine, though not silent in admonishing against its abuse. Through the ages an abundant sentiment has played about the service of wine, given it a place in the sacrament, and an earlier function in the ceremonial liba-

tion, has made it the symbol of tribute and good feeling. It seems likely that healths will continue to be drunk as of old; and toasts celebrated in cold water, however crystal pure, fail to carry the flavor of the hallowed rite.

Moral denunciation and æsthetic objection are legitimate arguments, but uncertain ones. They revolve in part about sensibilities, and these go back to the personal and the temperamental basis. If it be true that those who look indulgently upon a glass of wine and a cigar, or a mug of ale and a pipe, in the average run belong to the less sensitive and considerate members of the community, as compared with others of like social status who have not succumbed to these temptations, the argument would begin to assume moderate weight. Similarly on the side of health: if physicians, whatever they prescribe for others, in their own practice for themselves are as likely as not to take an indulgent attitude toward alcohol and tobacco, they express as pertinent a verdict by example as by precept. The same applies to editors who present one attitude for their readers and another for themselves; while the reference to ministers in this respect may be discreetly avoided.

The other aspect of the matter is more definitely sentimental. Such sentiment, in assuming an indulgent attitude toward the indulgence, is admittedly a favoring predilection; but the fact that it has become attached to this form of indulgence is not without significance. It argues for the congeniality of the indulgence to the *ensemble* of the traits that make for an appreciation of the values of life. In view thereof, the

intolerance displayed by those to whom all this type of sentiment makes no appeal, seems sadly out of perspective. The story of a famous writer who pictured the hero as partaking of the cup that cheers, and was advised by the editor that in deference to the public the incident might acceptably be deprived of its alcoholic flavor, is not too improbable to be true, and is in a line with the protest upon the part of ardent prohibitionists against the ceremonial breaking of a bottle of champagne at the launching of a government vessel. All this is indicative of the temper of convictions that claim a superior sanction and glory in unyielding tenacity — an unwillingness amounting to a horror of adjusting attitude or conduct to the judicial perspective.

The spirit of Puritanism may be viewed sympathetically in its historical setting. If followed too literally, it would banish the drama, and because of the allurements and immoral temptations of the stage — all real enough and a constant menace — offer no other solution than their abolition. Cards become the Devil's counters and dancing his enticement; both are to be shunned. Gambling may readily become a serious evil demanding vigilant regulation, and dance-halls are the undoing of many. Even "bridge whist" may lose its legitimate service as relaxation and destroy the sane perspective of the values of life. The moral argument is thus set off against the sentimental one. This is legitimate within judicial limits, but in any liberal democratic régime must be referred to the field in which each must exercise those virtues of judgment and restraint that neither paternalism nor prohibition nor

intolerant prejudice can or should regulate. One will hardly go far in reasonable adjustment by setting up false antagonisms of this type. Let each draw his distinctions of *licet* and *non licet* according to his lights, and respect all others who draw them differently, with no less integrity of conscience.

No claim is made for indulgence in its own right, nor for any relaxation of the eternal vigilance that alone is the price of moral safety. It is urged that the moral aspects of the issues be not too obtrusive; for, though legitimate, they are subject to a large plasticity of influence. Reason, usage, propriety, breeding, circumstance, all play upon them and make their truer adjustment a matter of a sense of value — a fine art and not a crude proscription. Other moralized sentiments show the same relations. Even so commonplace a sentiment as shame may serve as an example. Morality requires a sensitive sense of shame; but the situations to which it shall be applied are most variable and complex. Just what we shall and shall not be ashamed of cannot be scheduled in however liberal a system of commandments. *Honi soit qui mal y pense.* It may even be the case that the same qualities or actions of which one man is ashamed, another is proud. A weak sense of shame is certainly a fault, and shamelessness a vice; but the like is true of prudery, in that both interfere with a more desirable disposition of the play of modesty in thought and deed. The reference is also pertinent because shame enters into the attitude toward indulgence in alcohol and even tobacco. If the community sentiment is such that these indulgences cannot be freely acknowledged, they acquire a little of

the tarnish of a secret vice. In view of this psychological factor, it has been wisely urged that if the screens and opaque doors were removed from saloons, the American bar would lose some of its unfortunate features; though it would take far more than this to redeem it wholly. We are all aware how different is the attitude toward these indulgences, how completely different is their use and regulation in other communities, which may lay claim to as proper consideration for morals and manners and health as those that look with suspicion or horror upon these practices. The individual is inevitably controlled by public opinion. It is because such opinion is readily thrown out of its judicial perspective by a violent sentiment, that its care is a proper charge upon the leaders of opinion. In this service the psychologist may properly ask to be recognized. He participates in the shaping of standards and attitudes; and these make the controversial situations — make them or mar them.

It is to the congenial and sympathetic court of indulgence that the "case" of alcohol and the "case" of tobacco may safely be referred for trial. Nor is the plea that of "guilty with mitigating circumstances"; the point is rather that the entire procedure of criminal or even of civil hearing is unsuited to the case. May it not be that Justice is represented blindfolded not merely to confine attention to the cause, with no favoritism to the suitors, but as well to symbolize that there are other jurisdictions remote or excluded from her austere domain?

IV

The psychology of indulgence, to whatever field applied, is subject to a common interpretation. It may be developed positively with reference to the principle of the urgent expression of impulses and needs, of low and high degree. Specifically, the human machine is so complex in construction that it seeks moments of expansion, vents of emotion, releases of tension, and quite as distinctively yearns for enhancements of experience that come to the fore in the minor charms and greater thrills of the emotional life. It may be developed negatively with reference to the principle of unwise suppression; for there is a set normal limit to salutary discipline and reserve as ministrants to self-culture. Carried beyond such limit, undue restraint may lead to insidious invasion of efficiency. Insistent denial of impulse, tolerance of secretive aversion, may in abnormal cases induce an undermining of stability, the cause of which is commonly unsuspected. Speaking to these aspects, the statement of principle may be brief and confident. The art of application, like all art, is long, and not teachable by any less experience than that of life itself. The primitive stress of impulse is urgent; the exercise of function in the simpler orders of expression is amply provided for by natural outlet and common occasion. The optimistic joy of action and expression as a satisfaction of needs is duly recognized as the cry of red-blooded life: Let life be lived to the full!

To complex adults the simple life is a delusion; sophistication makes it so; cultivation strives to make

it more so. The satisfaction of needs moves upward with the levels of their attainment. Hence, the suggestion that milk is for babes and stronger potations for men. Let it be conceded that richness and expansion of life involves a fullness of expression as of appreciation; quite as it involves an acquired restraint, a poised self-control. Maturity is achieved by successive and cumulative exercise of restraints, reserves, repressions, and denials, by which the primitive cast of our nature gives way to the disciplined ideals of our nurture; the most comprehensive of these are imposed by social relations. The more complex social regulations require more complex types and occasions of relaxation.

To provide for the psychology of indulgence under the conditions of twentieth-century life cannot be a simple matter. Racial and national preferences, strengths and weaknesses alike, are shown in these provisions and their sanction in sentiment and custom. The contrast of North and South, of Anglo-Saxon and Latin, of sunny and gray skies, reappears in the psychological contrast of stolid reserve of the one, and freedom of gestural and facial expression of the other; in staid or ready sympathies, and also no less in the effects sought and found in beer or wine: likewise in the mode of succumbing to intemperance. But all this is complex; the prevalence of intoxication is not revealed in the statistics of the consumption of alcoholic beverages. Manner and measure and occasion and the kinds of beverages all participate in the result. In so far as these are unconsidered, statistics ignore psychology. Different peoples require different types

of relaxation and indulgence; moreover, the social "case" of alcohol must not be considered by itself. It stands along with other indulgences, and with them frames a scheme of life, involving profit and loss. If it be decided deliberately and reasonably that the danger exceeds the zest, let the use of alcohol be abandoned by those thus convinced, but without animus against those who reach the opposite conclusion in the exercise of the same reasonable judgment and reasonable temper. Also let those voting "no" stop a moment to count the cost, for there is a cost — an equally legitimate cost as that recognized by those voting "aye"; both relate to the cost of excess. Excessive restraint, or even too constant frowning upon indulgence, may lead to a narrow, austere, sunless perspective of life, or yet more mildly throw a shadow where indulgence sheds a beam of sunlight. Blue laws are archaic, but their temper survives and in no application more characteristically than in the singling out of alcohol as the special offender, with tobacco as the minor accomplice. It is because these indulgences have had to bear the brunt of the charge that it is worth while to plead the case of indulgence in their behalf.

Let us face the question of excess. As war indicates the momentary failure of the peaceful adjustments of conflict, so intoxication indicates a serious fault in the normal adjustments of relaxation. A temperate people stands higher than an intemperate one. A peaceful nation is not by virtue of that fact in any measure cowardly, weak, or soft. Its unwarlike spirit *may* be thus determined, but even more probably it *may not.* It may have found vents and occasions in other enter-

prises for the exercise of the virile qualities which war unquestionably develops. A temperate people, made so by imposed abstinence, reaches the end by less worthy means. It does not solve its problems, but abandons the solution by substituting for it a proscription. It may well be that under certain situations the dangers involved are too serious to take the risk of any other type of regulation. The regulations accepted thus become a clue to the collective psychology of the community. Stated the other way about, the yielding to drunkenness becomes an index of racial or national weakness. The fact that so large a portion of alcoholic indulgence in the United States takes place in coarse and even degrading surroundings is a legitimate arraignment, either of our people or of our social regulations, or of both. If we cannot take our alcohol and our tobacco soberly, we must assume a large part of the blame and place it where it belongs, and not invidiously upon alcohol and tobacco. These minister to the satisfaction of certain cravings, admittedly in the field of indulgence; if we cannot take our indulgences wisely, the unwisdom is ours. And if we reach the conclusion that our social psychology is so unfortunately established that we cannot change it, or cannot take the risks incidental to such a reform, let us face *that* situation frankly and penitently. To this end we may find aid by contemplating the happier solution of other peoples in other lands. To array ourselves as plaintiffs and make alcohol the defendant, is to falsify the true relation. With this attitude of social responsibility we have become familiar in other relations. We ask ourselves how far our treatment of crimi-

nals and crime is responsible for the prevalence of crime and delinquency. Yet we know that however wisely we regulate such tendencies, we shall always have crime and drunkenness, just as we shall always have poverty. All these we constantly try to reduce to a minimum, and are constantly examining how far we can exercise a salutary social control. It is the same type of endeavor, exercised in the same temper, that is demanded for the case of alcohol.

Viewed more individually, the psychology of indulgence takes account of the holiday mood, the constant small and occasional large enhancements and high lights of experience; it sets store by the breaks in routine and by the minor easements of existence, and considers a life bare and cold that lacks the generous economy which indulgences serve to relieve, as well as a life dissipated that by excess disturbs or wrecks it. It finds a place for indulgence in the habits that make up the stream of daily occupation, and by their more common presence — as against the occasional holiday — are cumulatively more important. It emphasizes as well that it is the mental attitude that makes the zest and forms the tonic, while yet it realizes that zest must be affiliated with and developed from needs set in the heritage of a common appetite. Good cheer aids digestion; but digestion may crave and in like spirit welcome a physiological stimulant. If body and mind are closely allied, the recognition of the kinship should be mutual. Feeding, like working or thinking, or any aspect of routine living, must find its relief in indulgence. We indulge in idling and playing, in vaudeville and dime-novels, in amusement-parks and motion-pic-

tures — all more or less wisely and more or less riskily. But we have no intention of doing away with all these types of indulgences. There is indulgence in eating, but this, like drinking, in addition to moral and hygienic consequences, raises the issue of extravagance, which for the moment should not be emphasized. The fact remains that releases from routine are thus demanded and enjoyed; and life takes its stamp from the manner and measure of their recognition. Wisdom lies in temperance in all these types of indulgence; excess everywhere lurks as a danger. A motion-picture jag, or a dime-novel jag, or a bridge-whist jag, is in principle as open to danger as an alcohol jag; its consequences are different, but that does not entail a different psychological appraisal of their legitimacy.

Eating furnishes the nearest analogy for drinking; and there we find the same variation in terms of necessity and luxury, of food-value and zest-value, from solid nutriment to fruits and flavors and condiments and relishes and desserts, and no differently in the solvent and mood of wine. Variety of food and a mixed diet confer a psychological benefit; occasional banquets maintain the zest. Roast beef is a feast to the peasant indulging in meat on Sundays only; it loses that quality in a monotonous hotel diet. One may accept or prefer the same breakfast day by day, but by that very token demand a different dinner. In the composition of the meal as of the courses, the same variety that is the spice of life is insisted upon, the same demand made that some of the ingredients shall stand for the zest and flavoring, that some shall be valued more as stimulants than as food. The principle holds for the

larger features as for the details of life, and of its physiological as of its psychological ordering.

Selection and regulation is ever an art, and as such, of however lowly a degree, may ask the same freedom from hampering restrictions or prejudicial tabooes that are approvingly granted to arts of loftier concern. Moreover, there is a sanctioned scale of indulgence; and it is but a question of drawing lines according to our preferences, ideals, or customs, which differ no more than the views and diversities of our philosophies. Tea and coffee are indulgences; a rating of their value or injury cannot be obtained from the admonishing advertisements of substitutes for them, or of the opinions of those who find them unnecessary, unsuited, or harmful. If some prefer on occasion a dash of brandy in coffee or of rum in tea, the indulgence has not wholly changed its status. The laborious proofs that alcohol and tobacco are, strictly considered, unnecessary, are likewise themselves unnecessary. There is no contention that these represent the only indulgences of their kind; merely that when viewed with the spirit of indulgence, they have found a place in societies that are mindful of the sterner duties of life, as of the dangers of excess in what in temperate measure relieves vocational strain.

Leisure, luxury, relief, indulgence partake in this respect something of the parallel excitements of sport. The shooting of corralled game comes near to butchery; and if one is so worried by the sense of danger that the chase is a torture, the enjoyment is gone; between the two lies the zest of good sport, of the enhancement of experience through the thrill of uncertainty, or even

of danger. Here, too, humanitarian and other considerations enter; and we cannot expect agreement as to the legitimacy of shooting and hunting, though we may rather envy the exhilaration and enthusiasm that a devotee gets from gun or rod. We realize that all this is debatable ground and a controversial issue. If we observe that individuals and societies, respectful of the serious duties of life and considerate in the regulation of their relaxations as well as mindful of the dangers attaching to indulgences, find a proper and restrained place for alcohol and tobacco, we must be prepared to accord them the right and privilege attaching to such sanction; for that is the type of adjustment that prevails in controversial issues.

V

The psychology of suppression is equally to be considered. The adherents of the Freudian school of psychology look upon saving rather than spending as the root of mental evil. The miser rather than the spendthrift becomes the shocking example; the sour-faced ascetic and disappointed spinster, rather than the cheery epicure and the contented *mater* or *pater familias*, happy despite the high cost of living. Certainly the most charitable view of the miser is to regard him as abnormal, as lacking, by inherent defect or acquired perversion, wholesome impulses and channels of expression of desires and their satisfaction. However conditioned and however exercised, miserliness, like all greeds, makes a vice of repression out of the virtue of moderation; it makes of thrift an obsession. The abnormal — as is true of so many phases of conduct,

so also of indulgence — has a lesson for normal psychology. Suppression is not so innocent as it appears, though unrestraint, which stands so close to indulgence, loses none of its dangers. Both sides of the case offer warnings. There are cases in which despondency of mood, paralysis of desire, hesitations, broodings, obstacles — all thwarting action and throwing the mental equilibrium seriously out of balance — are traceable to persistent and long-standing suppressions and repressions of impulses and desires which nature has implanted deeply in the fiber of our being. To find the source of the emotional obstruction that dams the freedom of flow, often by the very release of conscious confession, restores tranquillity. The mental abscess has been lanced, and relief follows. Preventively at earlier stages, the provision and enjoyment of slighter normal indulgences might have averted catastrophe, by inducing a freer habit of expression. The mechanism of suppression is subconscious and by that token is insidious in its invasion, unsuspected in its onset. Such is the reinforcement of the principle of indulgence derived from the lessons of mental disaster inherent in over-suppression. So, on the one hand, over-indulgence — which includes constant indulgence of trivial degree, even more than occasional debauches — leads to a mental habit of willfulness and unrestraint, quite apart from the actual injury of the indulgence; and on the other hand, constant suppression and denial dams the emotional current with quite comparable disaster. The choice and mode of indulgence is a separate matter, but like the degree and manner of indulgence, is largely a temperamental reaction, an individual

adjustment. Such adjustment, like all economy, becomes a matter of a budget; and the legitimacy of expenditures is determined by the same complexity of judgment that must ever be called upon in making up the accounts of living. Economies may be wise or foolish; far-sighted or near-sighted. Indulgence, the policy of generosity, seems to find support in the psychology of our emotional nature — the emotions themselves, as in the play of the imagination, supplying the indispensable relaxations as well as inspirations for the rigors of duty and the obligations of reason. To exclude alcohol and tobacco from the privileges of such consideration is psychologically unwarranted.

There is no intention in the application of this argument to imply that the authority of psychology may be cited in behalf of smoking or drinking. The path from principle to policy may be clear; but the interpretation of policy as applied to specific practices must be uncertain. It is possible to state conclusions in the indicative and the conditional moods; but the categorical statement must be cautiously appealed to. Ideals, however well established, are ever in the making; and the psychologist, like any other specialist or layman, brings to the transition from theory to practice the trend of his personal bias. He may do this quite frankly, while presenting the bearing of his findings as his professional insight sees them. The message of the psychology of indulgence is authentic and vital; whether the interpretation is sound and the application wise must be left to the same sanity of judgment to which the regulation of the physiological and psychological economy is approvingly referred.

As to the special psychology of the alcoholic indulgence, a slighter consideration will suffice. There are some who claim that the moments of exaltation are in miniature moments of ecstasy, of getting out of ourselves — in lesser measure and more commonly — of dropping the handicaps of repression, the thralls of convention, and thus attaining geniality if not inspiration. Alcohol unbends, releases by banishing restraint, sets free the truer self. By all means a steady fire for the heat of the work of the day, but the occasional spark for the illumination of insight. Moreover, it is urged, the general habit of susceptibility to such appeal raises the quality of endeavor, supports the mechanism of elaboration, makes for originality and the higher gifts of service of the mental life. Clearly alcohol confers no gifts, educates no facility; "*Der Wein erfindet nichts; er schwätzt nur aus.*" The admission gives the clue to the opposition: inspiration thus induced is often babbling; the exhilaration an illusion, the stimulation artificial, the dependence upon it an uncertain crutch; the plight of the lame and the halt who counted upon its support, an adequate sermon. The alternative does not exclude the middle ground of temperate indulgence.

Such tolerance is more readily gained for tobacco, in that its effects present no such drastic issues. The evil effects of tobacco are less comprehensive; the intemperate habit is less easily formed, and in formation more readily restrained. But, more importantly, the associations of the indulgence are more easily assimilated in the prevalent social customs. All this is admittedly a matter of convention, and the present plea

urges that it may wisely be left to the forces that, under discriminating oversight, build convention into a sanction. An apt illustration is furnished by the objection to women's smoking. The fact that the standards of indulgence as well as the forms of indulgence are different for the sexes, is again a complicated issue of the many composite forces that have been passed in review. That women have the same right as men to claim the privileges of the psychology of indulgence, can hardly be questioned; that the status of the indulgence in their hands will be determined by the personalities of those who practice it and the setting which they give it, is equally clear. For the attitude toward a habit and its setting go far to determine its status. The important consideration in the use of alcohol and tobacco, as of any other indulgence, is to surround them with those influences and associations that make their use, as far as may be, a fine habit and not a coarse one.

How far the problem of alcohol is the problem of the craving for stimulant, or the convivial drink-habit, or the low saloon, is the decisive issue that determines the remedy to be sought. The problem will yield to solution under unprejudiced scientific investigation at the hands of physicians, social workers, physiologists, psychologists, and practical moralists. Let these interests study, consider, and recommend. None the less, indulgence brings a legitimate if minor plea. Public hygiene, moral health, and economics may well acknowledge the plea of the psychology of indulgence, while yet they maintain the supremacy of their own interests. Condition and circumstance must be dis-

criminatingly considered. Sweeping regulations are always simpler to propose and enact than discriminating ones. If the American temperament and American conditions are so unsuited to the favorable assimilation of this type of indulgence, so disposed to exhibit its dangers in the most extreme form; if experience proves the hopelessness of any reforms which shall surround indulgence with respectability, it may be wise to admit defeat and surrender. To repeat: Prohibition is not a solution, but the abandonment of a solution. While the regulation by statute of the use of tobacco has hardly been attempted, one phase of it has brought about the same undiscriminating legislation that is to be feared. To find a group of States in which a cigarette is contraband seems a strange anomaly in a democracy that balks at so many wise forms of paternalism. That some of these States have repealed such drastic laws shows that reason may be reinstated. The complete prohibition of cigarettes is a double confession of failure; an admission that laws regulating the sale of cigarettes to minors will not be enforced, and an admission that legislatures can be influenced to abandon principles and enact paternalistic laws which they would not tolerate in other fields, and do so under the influence of prejudice which has not even the merit of sincerity.

It is as yet an open question whether, if all the interests in favor of respectability were to direct their energies to the elevation of the conditions surrounding the use of alcohol, more could not be accomplished. It still remains true that the wholesale denunciation and the exaggerated emphasis of one phase of the evil

disturbs the diagnosis and makes for unreason. It is but necessary to transfer the situation to other countries with other customs to justify the plea for discrimination in diagnosis, treatment, and prevention alike. Amelioration of social evils has usually yielded to judicious treatment rather than to narrow-minded or undiscriminating propaganda. It is with such a policy that the psychology of indulgence establishes a ready sympathy and support.

X

THE FEMININE MIND

"We can bring no more to living
Than the powers we bring to life."
KIPLING.

AMONG issues characteristically modern, the controversy as to the true nature of woman and her place in the social order is peculiarly rich in complexity of argument and variability of conclusion. With the varied status of women in different lands, with their achievements in older days and in the near and nearest generations fairly familiar, with the intimate knowledge of womanly ways and doings which is the common experience and the common tradition, the data for judgment as to the psychological endowment responsible for these products seem adequate and accessible. And yet the fact that the problem exists in a sense in which there is no man question is often accepted with no curiosity and little concern. Much of this is due to the adjustment of tradition. In every situation the woman question is practically solved, yet resists an enduring solution. The restless dissatisfaction with the *status quo* leads to question and reform. The contrasts of national solutions remain interesting, and no less so when shifted to the narrower contrasts within an accepted range. Modern technique brings to the question a different approach, generally biological and specifically psychological. In an analytic spirit

it detaches circumstance from nature, and measures as it explores.

The present survey attempts to bring to bear upon the psychological phase of the problem the combined evidence of theory and practice, of science and tradition, of experience and test. The question at issue is whether and how the feminine differs from the masculine mind; how far the observable differences of achievement and response are the result of tradition and education, or of original nature doubtless reinforced by artificial direction. Application stands close to interpretation and demands a hearing. The issue comes forward in questions of the day: whether women should vote, should enter this or that profession, should enjoy this or that privilege or right. Decisions are difficult and discussion constant. Prejudice and convention exert a powerful influence on conclusions, and logic is often ignored or retired to a subsidiary issue. Facts and their interpretation are confused, or more commonly their significance distorted. The issue extends to all spheres of living and the spiritual supports of life; to industry and commerce, to education and profession, to art and science, to family life and public concerns, to religion, to ethics, to all the massed influences that constitute the social ideals and the social control. Institutions embody the prevalent views and customs reflect them. Psychology claims a special place in the hearing; for it is predominantly the nature of the mental endowment of woman that is decisive. Her fitness and capacity determine, under the admitted deviations of opportunity and custom, the types of her career.

A survey of such broad scope should not be hurried in procedure, as it should not be hasty in conclusion. Its purpose is at once to throw light upon the composite forces affecting the actual decisions reached by all sorts and conditions of men and women, and yet more particularly upon the significance to be attached to the several orders of evidence and consideration. This double purpose affords the clue to the presentation. Such a judicial survey is consistent with a definite view of the favored conclusions, once the principles of interpretation are reached. The issue is one of a considerable group in which a scientific-minded approach is possible, though a rigid scientific procedure is not. The common bias and prejudice of convention and usage may be overcome; yet the divergence of opinion remains, by reason of the variable emphasis attached to one or other order of evidence. The *rapprochement* of method is important, even though the differences of opinion remain; for a *modus vivendi* and a practical coöperation in the actual issues of the day, in so far as they depend upon an enlightened view of the feminine mind, are thus rendered possible. The same forces are responsible for the changing status of woman that is recognizably moving in a definite direction to the great benefit of social progress.

I

The nature of the feminine endowment is primarily an affair of biology; biology divides the responsibility by referring the question to physiology, to psychology, and to sociology. These speak with the voice of authority; and to them the public listens with its custom-

ary deference, tinged with suspicion. For every man presumes to know and every woman knows feminine behavior and character intimately; so the personal verdict dominates, undisturbed by what science has to say. Moreover, on so engaging a topic the average mind is as little disposed to be critical as it is to be objective. Hence, the popular and the scientific versions of the "eternal feminine" diverge; likewise the ancient and modern ones, and those of class and mass.

From the academy and the laboratory come learned treatises and essays, some ambitious and comprehensive, others modest and restrained. In its view of the "eternal feminine" the public follows a tradition that reflects the experiences as well as the prejudices and impressions of a preoccupied, slightly reflective, largely sentimental, and frequently confused, democratic order of wisdom. The men of science report: "Here is our analysis, and such is the nature of woman." History, the formal spokesman of experience, replies: "Here is the career of woman; in the story read the nature of her parts." More informally the idea and ideal of the feminine appear in the drama, the novel, the story of the day. These several renderings offer contrasts rather than conflicts; they present varieties of perspective. Throughout the question appears and reappears: Which is the truly, intrinsically feminine, and which the favored or enforced manner of feminine expression? Society changes its forms; evolution proceeds, and takes the feminine with it; what in all this change is the inherent, eternal feminine? "Thus natured, woman could not be other than she is," says the positive scientist. "Responsive to condition, the woman

of each age and stage of culture becomes what her world makes of her," concludes the cautious historian, remembering his *varium et mutabile semper*. The versatile past, the responsible present, and the glorious future of womanhood each finds its special pleaders in the variegated literature of the feminist movement. To rescue the problem from confusion and sentimental distortion is in these tolerant days a possible if not a grateful task. Despite an occasional editor or legislator or other worldly cloistered soul, men are about ready to admit that women are people; also that the nature of femininity may become a definite and disinterested inquiry, as well as a worthy one. "We have comprehensive monographs on silkworms, beetles, and cats, but none on women," says an Italian anthropologist, who attempts gallantly to supply the lack.

II

Such a monograph might well begin with the obvious but significant statement that men and women are obviously and overwhelmingly alike. They are alike by reason of a common nature, which means a like evolution through the remoter ages; and yet more alike by reason of the common schooling of experience through the nearer generations. They are still more conspicuously alike in that the social tradition moulds them to a common pattern. Yet to all these influences the sexes react differently. The actual status and achievement of any section of the human race is intelligible only as a vast transformation of original nature, which affects similarly the present nature of both sexes. The racial heredity and the racial history

prevail. What the sexes have in common still dominates even in the present complexities and artificialities of human nature. Under one interest or another we may push this community into the background; without it the foreground would be unintelligible.

And so we return to first principles: the significance of sex remains. Nature's intention is as plain as her execution. "The powers that we bring to life" are already specialized by decree of nature. "Male and female created He them." If the principle of a physiological psychology is sound, like minds in unlike bodies are a contradiction. Along with their community men and women differ broadly and deeply.

There is no need to review the established differences in structure and function, in skeleton and organs, in metabolism, in development, in liability to disease, in every minute detail of bodily economy; it is necessary only to observe the pattern of closely woven connection thus set by nature. Such differences of bodily structure and function obtain over and above the direct functions of sex; they constitute an array of secondary or associated traits. Some stand close to and support the complex interests of sex; others are derivative and remote, radiating to the minutest biological details. Such differences express specialization and the issues of specialization. "A man is a man even to his thumbs, and a woman is a woman down to her little toes." Anatomy, physiology, and pathology tell a concordant story. What reason is there to expect psychology to enter a dissenting opinion?

Nature makes differentiation significant to the drama of sex. In human psychology each sex becomes addi-

tionally attractive to the other by a variegated unlikeness in appearance and expression. Sex is a biological emphasis. It carries with it a diminishing perspective of derivative traits. Some of these traits are of major and others of minor import; some stand close to the center of the powers that we bring to life, and others are more or less remote. Heredity carries forward the entire composite of ancestral traits. In the long run fathers and mothers contribute equally though differently to the endowment of men as well as of women, and both are more interesting and richer in possibility by virtue of their dual heredity. Yet every heredity is subject to the supreme emphasis of one sex alone, which brings it about that there are no human beings — only men and women. Sex remains the eternal motive of Nature's organic design.

The differentiation of men and women is thorough, comprehensive, and established; its existence is beyond question; its limitations and consequences offer a meaty bone of contention. Woman, whether by nature controversial or not, is to-day a controversy. Conclusions, though they differ widely, are held confidently. Like many another opinion, that concerning the nature of woman is formed by precipitating an interpretation in the solution of facts. The interpretations are more largely responsible for the divergent opinions than any disagreement upon the facts. The facts are gathered by observation, extensive or limited, crude or refined, and presumably objective and unprejudiced; interpretation enters and proceeds upon a system of values. In terms of fact, no one is tempted to question that when Nature has her way, men have beards and women

have none. But by way of interpretation, to determine what use or advantage a beard is to a man requires a standard of values. To consider a bearded sex as superior or inferior to an unbearded one is a vain assumption. For, once more: sex-traits are more or less central, or more or less peripheral, fairly vital or fairly trivial; or they are significant in one aspect, and differently so in another. In Nature's scheme — which must be accepted, though decidedly modified by human purposes — beardedness is an incorporated masculine trait. For adequate reasons, however obscure or to our thinking irrelevant or perverse, Nature conserves the beard. The Mohammedan may accept it and swear by the beard of his prophet; the twentieth-century American citizen may accept it more profanely by an irksome obligation of a daily shave; but even a Christian Scientist cannot successfully deny its stubbly reality.

Human interests lie in values rather than in facts. Civilizations have arisen and have assumed their various complexions by virtue of this preference and the manner of its expression. The important type of value is social value — value for human living as it is organized in the environment of the age and the community, as it is shaped by the traditions and institutions in which the individual is embedded. The individual's habits are saturated with the mental inheritance and the imposed schooling of his tribe. Great streams of influence, ancient and recent, general and local, massive and delicate, pour down upon him, determining the set of his beliefs and attitudes, for better or for worse, for richer, for poorer, in his lifelong

alliance with the social conditions of his habitat. All this makes him or her the particular kind of a human being that he or she is.

What is true of conditions is also true of opinions. Opinions, scientific as well as impressionistic, expert and popular, proceed upon an accepted set of values. Facts in the abstract are naked and neutral; their very selection clothes them with a partisan tint. Thus clothed, they are fashioned into opinions. The business of natural science is to interpret the facts in terms of natural values, yet human values enter. For many purposes that is legitimate, as it is inevitable. Science aims, however, to render unto Cæsar the things that are Cæsar's. At best, science is a bold restoration of the torso of our partial knowledge. As such it is the work of the critical and skilled imagination. Leg and arm, trunk and head, are alike indispensable, but not equally a clue to the meaning of the whole, and to the spirit of the composition. Proportion and perspective determine the impression even more completely than content. Facts in themselves are mute; they await a unified interpretation. Hence, the difficulties in reaching a right conception of the feminine as differentiated from the masculine nature; hence, also, the justification of this logical approach.

III

Sex is as ancient as it is significant. The human disposition of sex forms part of the interesting record. In the natural environment, before the disturbing intervention of historical change, the powers of life adequately determined the powers of living, for men

and women in common and distinctively. Primitive living was a foray and a combat for food and wives, and for the protection of a cave or shelter for the cubs. The powers brought to life and matured by living were directly concerned with food and family. These concerns and the qualities to meet them remain primal, elemental, inexorable. They shape existence for the twentieth-century tenants in steam-heated sky-scrapers no differently than for the original cliff-dwellers. The powers that we bring to life are essentially unchanged — so the anthropologists assure us — and only the living profoundly altered. What this means is that the powers of the human brain — the limiting instrument of all power — were fixed by and adapted to the needs of primitive living. The oldest, deepest instincts in human psychology are those of the cave-man and the cave-woman. Living was for long centuries of this simple order, and in comparison has been of the civilized order only for brief years. What saved and expanded the powers of life were the large playfulness and long helplessness of the human cub. Maturing is gradual, and is in process an instinctive and irregular trial and error, joy and sorrow, in attempt and growing success and enlarging enterprise. Play is deep-rooted, and once tasted is never absent from the game of living, and becomes its redemption from ferocity. Play enters into occupation as well as relaxation; the satisfactions that make doing things fun take their place beside food and family to make life livable. The powers that we bring to life may be measured in relation to their ministry to the concerns of food, family, and fun; such is their service

in their near-to-nature perspective, and such they remain.

The original woman question is accordingly this: How far do the specialized functions assigned by Nature carry with them other ranges of power, of fitness and limitation, of advantage and handicap? In quite the same spirit of neutrality, the assets and liabilities of the masculine economy require examination. To over-tailored minds there is something derogatory in the notion that qualities of high esteem and remote employment should acknowledge so lowly an ancestry. Such prejudices are irrelevant and disturbing. It is the attempt to rise above them that characterizes the scientific temper.

In the achievements written in the conquest of Nature and of human nature, lie the honor and the glory. The ancient traits remain, but are transmuted in the crucible of civilization. It is a long road from marriage by capture or by purchase to chivalry, romance, devotion, sacrifice, and the art-embellished enhancements of courtship; yet they all belong to the same psychological tale, saturated and thrilled with the love-song of sex-attraction. Without these life seems almost unthinkable and living impoverished and bare. Strong virtues and strong vices are rooted here — the strength derived from a common source of the powers of life. The rôles of men and those of women in this drama are different; the difference runs the gamut of human nature and in no rendering is more sustained than in the psychic one. The part played by food in the drama of living may be no less comprehensive than that of sex, and no less momentous; its moments may

be less tense, but are more constant, differently formative. Both pursuits with their associated energies go forward to the extended, transformed struggle for richer living, in the complex will to prevail, that imposes its urgency — though with difference of emphasis — upon both sexes.

In the beginning and continuously the sex-ardor and food-aggressiveness of the male sets his qualities in the mould of mastery. Might was and is the theme of his being; it vibrates in his mind as in his muscles. The bully shows it crudely in a small setting; the despot wields it grandly in a larger one. To judge by sleeping-car etiquette the propitious address for the American male is "boss," as it is likewise the less complimentary title of political influence. Muscular prowess was first in the field and remains in possession. In institutions ostensibly devoted to learning, brass bands greet the returning football heroes; but the initiates of Phi Beta Kappa remain unserenaded. The discovery of the North Pole is more thrilling than the discovery of evolution. It is aggressive exploration on a popular plane, nearer to Nature's patterns, and thus intelligible and appealing. It establishes a record which the grand-stand can appreciate and applaud.

Mental aggressiveness combines with physical aggressiveness or replaces it. Initiative and enterprise wait upon strength, as mind no less than muscle demands exercise. To explore and venture and possess — and in the first instance by direct physical prowess — confers the satisfaction craved by the masterful temperament. It orders the coming and the seeing and the conquering of the Cæsar in every man. The mad ambition of

the male, if unchecked, becomes the serious menace to humanity, a threat to other cherished values, unless restrained by other potent forces of living, rooted and made strong in other powers of life. Masculine performance and interest tend to a high-tension activity; in so far they follow the primitive pattern of the chase, involving active endurance, keen pursuit, hot rivalry, stirring climax, and the quarry or foe overcome. Big game and big business and the "big stick" appeal to the eternal masculine. Properly combined with a lion *rampant* and a fox *couchant*, these trophies would compose an appropriate male escutcheon. The strengths and the weaknesses of masculine psychology, no less than the fitness of the masculine powers of life to the forms of living at present cherished and established, or to the life and ideals of other days and ways, are to be considered with reference to one origin, as rooted in a common quality of the male. The problem of civilization — if we are prepared to interpret its mission pacifically — is to let the ape and the tiger die, without killing the man, without maiming the potential superman.

There is a further psychological principle that nurture reinforces nature and finds its motives there. Thus encouraged, masculinity becomes increasingly masculine. Primitive social organization shows the simple life at its simplest, and the strenuous life without complication. Those hold who have the power and those take who can. When, however, a man commands other men, however despotically, personal strength is replaced by social authority. The transformation is possible only by a psychological process; it endures

only as the psychic bond holds. The captain remains a captain so long as his crew does not mutiny. Organization follows the clue of individual rule. Its early form is military; for manly men soldiering is the oldest of professions. But the qualities of the soldier's profession, like every other, change as ideals and conditions change. What a man fights for, and with, and how, and the restraints he exercises, come to be far more significant than his original pugnacity. The soldier may be enlisted as a crusader, or as a member of the Salvation Army, or as an individualistic soldier of fortune, or as a philanthropic knight-errant of reform. The "conduct" and "satisfaction" pattern of fighting, like most of nature's patterns, is complex, woven of many strands. The psychological satisfactions of fighting may depart slightly or widely from the original type; they reappear in the employments of vocation and relaxation. Venture, pursuit, overcoming, rivalry, possession, authority, the rewards of shrewdness, and the plaudits of the crowd are all satisfying. They were in part established through fighting; they continue in the psychology of all manners of mastery. Sport enlists them so thoroughly that it remains typically a masculine outlet. But sport may enlist other patterns of satisfaction that encroach upon the "food" or livelihood interests. When the interests in the stake exceed that in the game, the player becomes a gambler or a pot-hunter. Our approval is for the authentic amateur, for sport for sport's sake. The word "amateur" (literally, "lover") implies another fundamental pursuit. A lover fights and likes to win, though marriage by capture is fairly obsolete. In all its expressions masculine ardor

is of one source, however variously expressed, variously composed. We deny as we cite that all is fair in love and war; but the association remains.

Such is masculine nature; and by consequence the imposed nurture insists upon injecting into all man-controlled pursuits a fair measure of the same qualities. Men so organize their enterprises as to make business a game, a competition, a fight, often a ruthless one; also they speculate and take chances. But as they gamble they use their wits; they plan the campaign, they measure and circumvent opposition, they seek the thrill of success. Not indifferent to other values, they yet excuse evasions or sharp practices by the dictum that business is business, which means that men will be men. The same intelligence has discovered that war is war, and that love is love. Yet thanks to the like penetration of the feminine mind, a warlike or businesslike lover is rarely acceptable; so the masculine endowment escapes too rigid limitations. To repeat: The masculine tendency is to make a fighting game of all pursuits, to bring to them the flavor of the typical male satisfactions. If permitted, men make politics a game, not too clean a one, and having stained it, advise sensitive souls — women and scholars — to keep out.

Equally important is the transformation of the masculine satisfaction as it extends its range, transfers its allegiance. The foray and chase stimulate the zest of experience, the spread of curiosity, the experimental inclination. The hunter becomes the trapper, the fighter becomes the strategist. Invention is started on its momentous career, and with it as the social counter-

part, the organization of man-power as well as of ox-power and horse-power. Power and conquest still enthrall men; but the instrument is no longer a simple pugnacity or blood-thirst, but conquest of nature, extension of mental dominion, forearming by forethinking, controlling by understanding. The mental quest brings its minor satisfactions as well as its tangible results; it brings them most generally in some form near to the primitive pattern; nor in complex undertakings are the earlier types forsaken. In such manner the whole man is transformed, but not wholly. Once society has incorporated and organized these derivative activities, boys turn as naturally into mechanics and engineers, or captains of industry and business men, as into soldiers. At an unsophisticated age they are enthralled by railway trains as readily as by fisticuff encounters. Girls are not debarred from these indulgences by a tyrannical male ukase, but by a decree of their nature; they are not devoid of either pugnacity, curiosity, inventiveness, or a love of sensation; but the formulæ of satisfaction which they naturally follow is sufficiently different to make the segregation that occurs in the College of Engineering as expressive of what women dislike as of what men like.

There is more than one lesson in the illustration: In the first instance, that the derivative and remote contrasts in what men and women do better than the other, differently than the other, with more decided preference than the other, follows consistently, though not rigidly, from consistent and rigid original endowment, indissolubly associated with sex. These differences may be man-encouraged, man-exaggerated, but

they are not man-made. A second consequence is that these very differences are not only of degree, but of limited degree; what the social system does is either decidedly to increase the divergence, or decidedly to diminish it, to encourage it, or to discourage it. In times of war women engage and acquit themselves acceptably in occupations which for a variety of reasons they avoid in times of peace. The peace standard, though not infallible, is presumably more legitimate than the war standard. A further consequence is that types of modern employments may be so remote from these original differences that the fitness of men and of women for them may be substantially equal, though this equality may conceal the fact that the male superiorities and inferiorities are of one order, and the female of another. Still further: It should never be forgotten that there are some sorts of employments in which small differences are highly significant, and others in which they are not so. One may as readily be deceived as enlightened by statistics and the bare outlines of facts; for, like words, they may conceal as much as they reveal.

IV

Leaving the masculine psychology with its forbidding logical flavor, we turn to an equally sketchy outline of the feminine nature as Nature has ordained it. The evidence is strong that the feminine endowment is even more heavily sex-determined than the masculine. Reducing pages to phrases, one may read, with abundant citation of chapter and verse, that women are truer to type than men, nearer to the race-norm

and the child-nature, more conservative and less variable. Prominent is the larger affectability of woman, which in turn is the nearer-to-nature reaction, and is indispensable to the race-preserving, mothering ministrations. The potential mother in every woman commands a larger range of her endowment, penetrates deeper into the roots of her being, radiates more intimately to the finer modes of her expressions, than is true of any sex-determined section of masculine psychology. The race-preserving qualities are in their feminine expression more absorbing, more sustained, more vital. The female of the species is more deadly in earnest for the species; her marginal activities reflect more warmly, more pervasively the focal concerns. She bears the sterling hall-mark of her nature more conspicuously and more responsibly. It has been well said that the Romans appropriated everything from the Greeks except their background; a fortunate son might inherit as largely his mother's qualities, but would always lack her background.

In her secondary trait a woman follows a double allegiance: the one set by courtship, the other by the care of the young. This duality — which under stress may approach duplicity — enlarges and complicates a woman's qualities; it gives her a versatility more exacting than is needed to make a man at once a good lover and a good provider. The belle and the matron are both present in the woman's dower; and those by dower competent to judge detect in some women the dominance of the belle inadequately under-studied by the matron, and in others the matron rather negligent of the other half. If the interests of the one, in

Hausfrau parlance, are children, church, and chimney-corner, the interests of the other may be disrespectfully rendered as charms, chaps, and chiffons, with chatter as a frivolous, and charity as a sobering ballast. The eternal feminine is as truly the belle as the matron. Historically, the rôle accorded to women has varied from slave to siren, to solace. At all times women have had to charm for their station, even for their living; and the technique of charm and its associated arts, which are many and of good standing, — and of not so good, — are hers by bent of nature and the inclination of nurture.

In both pursuits there is a large demand upon emotional endowment, upon sympathy and a temperamental insight into the play of intimate motives, of affective give and take — all intensely personalized. "Man has been compelled to face external Nature. Woman must face humanity." The personal passionateness of the mother standardizes much of feminine emotion; and in so far as the mental life is supported and colored by the emotional nature, — and that, like beauty or the love of it, is not skin-deep, but goes to the bone, — the feminine mind is bound to reflect originally, and in all its moods and tenses, the abounding sources of its inspiration. The larger possibilities lie here, the truer devotion to causes espoused, the more righteous appraisal of what things are vital and worth while, and an abundant following of minor qualifications, slighter superiorities, more congenial fitnesses for types of occupation, which shape female (and also feminist) psychology.

The larger limitations are of the same conditioning.

Certain profound transformations of the human mind must be accomplished before civilization can proceed completely, consonantly, successfully, and happily. Some of the qualifications for entering into the promised land — the promise that of inspired vision and the fulfillment directed by cherished ideals of the larger minds of both sexes — will be more difficult for women, and others for men. In so far as the transformation runs counter to deeply ingrained masculine traits, — strengths and weaknesses alike — men will have a longer and a harder road to travel to incorporate them into their being. In so far as the transformation opposes the feminine bent, — its frailties and foibles as well as its potencies, — the greater trial will fall to the lot of women. The civilizing process requires a reorganization of the psychic nature; if one sex has a readier facility for such readjustment, that facility will become a general advantage. For civilization, education, domestication, — call the process by whatever name, — is nothing else than the expression of the self-transforming power of the human mind, aided or hindered by the institutional establishments which that same intelligence establishes for the process. A dominantly masculine civilization will differ from a dominantly feminine one; either implies the capacity to control above the other. Every civilization reflects the parts assumed by the two.

The psychic changes that civilization demands of human nature, and the masculine and feminine way of meeting that demand, are decisive. They shape the conditions of living, and they determine the field of operation of the feminine along with and as contrasted

with the masculine mind. The generally human way of meeting that demand — as likewise, the way of this nation and of that — comes forward in the differences of ideals that make the large issues of our living. Nations go to war for such ideals; people travel and study to understand them and absorb them; missionaries devote their lives to extend them; commerce brings them with her cargoes. And always these ideals are differently absorbed and refracted as they pass through a psychic prism that behaves after the manner of a masculine or of a feminine medium of transmission. That complex refractive and reflective aspect of the feminine mind is the consideration eventually to be reached, but is present in our minds from the outset; it is, indeed, largely responsible for our entire undertaking. For the moment the important thing is to note that the transformations, large and small, come into being by a grafting process; the success of the graft depends upon the nearness of kin of the transformed to the original trait. Such transformations as stand close to feminine qualities will be better and more readily accomplished by women; those that sprout more congenially upon a masculine stem will blossom more abundantly in the transformed psychology of the male; still others may flourish as richly under the one culture as under the other, and yet show differences of growth.

That phase of the conclusion has been reached. The other side of the same conclusion requires statement. It is that the *mode* of the response reveals sex as characteristically as the *success* of the response. Mode, method, manner, technique carry the stamp of sex as

strongly, possibly more revealingly than the action or the interest. In so far as women qualify for the transformations demanded by this or that order of living, they qualify not only by virtue of womanly traits, but in a womanly manner. Sacrifice is inherent in a mother's nature; by virtue thereof the womanly nature is emotionally more richly responsive; that trait will spread itself over the entire range of feminine responsiveness. Women will share the profit and the loss of such generous affectability in all their reactions to life's situations, alike where it proves to be a benefit and where it does not. They may be disposed to approach and to solve problems emotionally by the technique of sacrifice (or it may be by the technique of charm), which require for their adequate solution, the technique of invention and mastery. They may be inclined to substitute feeling for initiative. By the same token they may have a tendency to over personalize situations, which is another consequence of a more susceptible and generous affectability. And a weak sense for the objective (which is a characteristic attitude demanded by science and made strong in its practice) may handicap them seriously in playing this part or that, for which, so far as all the other essential or supporting qualities go, they may be as well fitted as men. They may not take ideas so seriously as feelings, and may prefer good will to good sense. Grafted upon one and the same stem are the qualities that make women more sacrificing, more conscientious, more patient alike of drudgery and disaster, more sentimental, and less tolerant of personal differences, less impressed by far-flung systems of control, and more

inclined to yield devotion than to supply the direction of its energy. More bluntly put: the following of her natural bent may lead a representative woman to martyrdom, more or less futile, or more or less noble (witness the hunger strikes of imprisoned suffragettes), or to nagging more or less venial (witness Xantippe and her clan). Let the concluding emphasis fall upon this principle that manner maketh the man and the woman also.

V

But what is the bearing of all this upon the feminine *mind?* The mind is the instrument of reasoning, and logic does not deal with gender. In Mme. de Staël's words: "*Les âmes n'ont pas de sexes.*" The explanation of this gifted feminist's view that minds are without sex, is astonishingly simple: she was simply wrong. And there are psychologists differently mistaken by way of the other extreme, who hold that minds reflect little else than sex. A truer mean is expressed by Mr. Havelock Ellis: "A man is a man throughout, a woman is a woman throughout, and that difference is manifest in all the energies of body and soul." The truth is that the rational element in the mind's procedures dominates only in the few, and reaches so far as a moderately responsible control of conduct in the many, yet by no means in the vast majority of the average run of men and women. Of thinking pure and simple there is much that is simple enough, but not so much that is pure. Thinking colored by emotional inclination is the rule, even among the more intellectually inclined; and thinking warped by desire and emotional

bias is the even more common rule for the far more numerous non-intellectual classes. Considered more practically: if conclusions affecting human relations could be expressed in logarithms, minds would truly have no more sex than adding-machines; and diaries would be no more interesting than time-tables or bank-books. Thinking would stand free of emotional, and consequently also of sex-bias. Thinking, as it actually goes on (when charitably interpreted), includes the gross aggregate of mental processes that intervene between the appearance of a problem and the line of action decided upon for its solution — between vague impressions and definite convictions. Making up one's mind, like our display of an American flag when we travel abroad, is in many instances a superfluous procedure. The average mind is already in a state of preparedness; it may be caught in *déshabille*, but promptly assumes its formal and conventional habit. To unwelcome calls it is conveniently as well as conventionally not at home.

One must not be misled or cajoled by a word. The *mind* is the logical phase of the psychological nature. The mind as the instrument of perception and judgment must on occasion be distinguished from the composite personality that also attends to feeling and willing — the character. But neither minds nor characters exist in detachment. The only reality is the individual, at once mind and character, both set in a common nature. Young men and young women go to college to develop their minds, but in no sense leave their characters — or however they designate their none too logical selves — at home. They bring their total per-

sonalities, sex and all, to learning as to all other callings. And so distinct are the problems arising from this circumstance (which many even officially concerned with it take pleasure or pride in ignoring) that coeducational colleges appoint women Deans of Women to direct women students, despite the presence of fairly competent men on the Faculty. Recognizing this practical condition, psychology studies the feminine nature, mental nature, emotional nature, willing nature, conduct nature, — all in one, and one in all, — composite and sexed.

This consideration is important in its own right, and is additionally so because the perceiving and judging functions, which are favored in the ordinary meaning of *mind*, are likewise not detached. The mind as the logical instrument depends upon *supporting qualities*. These supporting qualities lie partly in the same field as the logical operations; such are keenness of perception, capacity for detail, sustained attention, ready imagination, range of association, a sense of pertinence, value, propriety, effectiveness. Quite as largely they are in the field of feeling and will, or encroach upon them; such are conscience, persistence, endurance, self-control, and that composite attitude that makes the professional temper. When these supports are considered in their actual relations to success and manner of undertaking, to the capacities, preferences, strengths of interest, inclinations to occupations, and all manner of fitnesses that make up the quality of the work of the mind in its daily rounds, it becomes clear how arbitrary it would be to view them as merely intellectual facilities, as detached in any manner from

the man or woman — body, mind and character — who directs them. The pragmatic differences in the feminine mind and the masculine mind, when both are set to work upon the same order of task, result from the infusion of the feeling and willing factor, quite as much as from any difference in logical power or method. The difference makes manner and quality as well as efficiency. The range, degree, and manner of one's interests are as much a part of one's feeling as of one's thinking; the complex play of interests as supports to *mind* are intelligible only when considered in terms of the total psychological nature.

In summary: The minds of men and the minds of women may differ less (both in general and in particular cases) than their supporting qualities. What men and women choose to attempt and manage to accomplish with their minds may depend more upon the supporting qualities they bring to bear upon the effort than upon any strong differences in mental capacity. Psychology recognizes such original and decisive differences, while yet it emphasizes that they are of degree only; but it considers them in their practical employment as aided by their supporting qualities. If this interpretation is sound, it is natural that isolated tests designed with slight reference to the supporting qualities (which play such a large part in the actual relations of a real world) should show slight contrast of the masculine and the feminine performance. Tests like facts, which they are, require the illumination of their place in the setting that gives them meaning.

VI

It is only in a limited sense that the mental aptitudes of men and women are subject to test. The test of the schoolroom is pertinent so far as it goes; the psychological laboratory contributes similar and more measurable comparisons. The experiences of trades and occupations add to the impression. The combined educational, psychological, and industrial records show, on the whole, a small range of differences — some favorable to men, others to women. This conclusion applies to tests involving the working of the senses, the direction of skilled movements, as well as tests in the field of memory, imagination, and the associative and judging processes. The most marked superiority is that of men in muscular strength and qualities of action related to this factor. A consistent feminine superiority is in the field of memory and the allied supporting, somewhat detailed and minute, secretarial or handmaid qualities that keep the mental affairs in order. Yet equally convincing of fair equality are the records of Phi Beta Kappa in coeducational institutions. These summarize the most complex array of mental aptitudes that may readily be compared in parallel columns of figures. Speaking broadly, and thus shallowly, so far as aptitude for study goes, the academic record divides the prizes — for there is more than one — and some go to boys and some to girls, though often with conspicuous exceptions and uncertain distribution. When projected in averages, the curves of such mental aptitudes decidedly overlap and present similar outlines.

When it comes to interpretation, the trouble begins. The pertinent question, if our principles are sound, relates to the place of the aptitudes tested in college, in a biological scale. Thus considered, they are obviously highly special applications of highly derivative powers to the third and fourth degree. The bare fact that young men and young women do so nearly equally well (by the tests of rank in studies) may have so unexpected a meaning as that they do equally badly. And this is not a slur, but the recognition of a fact: namely, that the specialization of the mental powers demanded by college courses, though not very rigid, is rigid enough to make the test limited and uncertain. It would be more so if one proposed to test the intelligence of the sexes by their skill at chess, — in which, from a professional point of view, most men and most women would do equally badly. The test is good so far as it goes; and clearly it does not go nearly so far as a "college course" test. Both tests would show that the standards of proficiency (in chess or in studies) set by a democratic requirement, or the modest qualifications necessary to keep one in college, represent but a part and a tangential part of the individual's total qualification for living. Men and women do equally well (or equally badly) in college, because their doing well or not depends on qualities too irregularly related with their most significant strengths and weaknesses. The records of what intellectually specialized men and intellectually specialized women do with their minds, when released from academic discipline, is a far more significant criterion. In professional pursuits, the supporting, congenially masculine qualities, combining with

the special intellectual grasp, may account largely for the overwhelming prominence of men's names in general biographical dictionaries and in those of the specialties.

It should be noted that in such comparisons the standards are shifting. In the selection of those fit for college from the total candidates (neglecting the large and disturbing factor of opportunity) the intellectual facility may prove to be about equal in the sexes. In the early days when few women went to college, those who went were doubtless of higher intellectual status than the average of men, or the average of women in college to-day; selection must be considered. The proportion fit for encouragement for the doctor's degree may show a decided contrast of sex; and successful candidates for important professorships may reveal still more pronounced differentiation of sex (after due allowance for artificial sex-disqualification is made). This specialized order of intellectual test, though in part legitimate, is indeed remote from the central function of the intellect to direct conduct rationally under the ordinary conditions of life. It may be gliding over rather than resting upon the significant sex-differences; it may be concealing rather than revealing the sex-differences on which a comparable amateur score is made. The professional standard may be needed to show sex-differences of so highly specialized a type.

High-grade intellectual logical quality lies so remote from the central and common utilities of a decently rational control of conduct, that it is almost the last place where one should look for pronounced and authentic sex-differences. And if it should be the fact

that some one quality in this domain dominates, and if that quality happens to have a stronger and more congenial hold on the psychology of one sex than on that of the other, such superiority may have a tremendous influence upon the achievements and occupations of the sexes. The tests, be it noted, are set by complex careers under highly civilized and specialized social conditions. Such a quality is originality; not originality alone, but supported by an aggressive persistence, an exploring curiosity, a directive management, and much else of like nature.

For no lifelong pursuit flourishes upon one quality alone; the combination which it demands widens the chance for finding a greater fitness in masculine or in feminine psychology. When a similar achievement is fairly equally accomplished by men and by women, it may still be that the qualities contributing to the comparable success themselves vary moderately or decidedly in the two sexes. And quite as significantly, men and women will not only carry to the same occupation differently contributing factors, but show a like difference of manner in expression. Even when no such complexity exists, the sex-difference may be significant. In general, women are doubtless as musically gifted as men, probably more so; the proportion of musical composers among men-musicians remains a significant fact, and the contrast of a masculine and feminine musical rendition equally so. Though such statements must be made with proper reservations, their significance remains. They direct the interpretation without which the bare facts are as likely to mislead as to enlighten. Once the right clue to inter-

pretation is found, the controversial issues may be led to a surer understanding and a more profitable application. The indispensable condition to following the right scent is the avoidance of the false ones. Among these the statistical fallacy is especially to be avoided; this claims for facts because they accurately represent what they represent, an authority over conclusions which the intrinsic value of the facts entirely fails to justify.

Statistics tell the truth, but not the whole truth; they are false only when falsely interpreted. There are professional psychologists who conclude, on the basis of the experimental and similar data, that women have proved themselves as well fitted as men for all vocations, that their intellectual equipment is comparable, that the exclusion of women from any calling is mere prejudice. That conclusion involves a double fallacy: it assumes that the intellectual test is adequate and is adequately tested by the given tests; and also that all kinds of differences are equally significant. It likewise ignores an important fact: that specialized qualities mature by the support which they find in the generic, more primary, more vital qualities, nearer to Nature's perspective. In addition, it overlooks that small differences may count, and count heavily, just in that proportion in which society finds a use (an unnatural use, it may be) for highly specialized qualities. If one will reflect upon the small place provided for a mathematical gift (that is, for that general type of aptitude upon which a proficiency in mathematics may be built) in a fairly primitive and natural condition of society, and will reflect upon the extremely modest

mathematical capacity found in the average person in school or behind the counter, — all of whom make desirable voting or should-be voting citizens, decently competent in all the complex relations of modern life, — one begins to realize how remote a part in a natural distribution of general and special aptitudes this mathematical proficiency plays. The fact that we honor one who has such unusual powers by making a professor of mathematics of him, and by supporting him in such affluence that it requires all his mathematical ingenuity to make both ends meet, demonstrates that our complex needs require in a highly selected few an extreme development of powers fairly remote from the ordinary range upon which a livelihood is gained and a life lived. So far may the powers that we bring to living travel from the powers that we bring to life.

The general relation of women to learning should not be dismissed without recognizing, indeed, emphasizing, that by sheer force of tradition society may impose a disqualification upon a sex, which, if not least aptly, at least inaptly, expresses a significant difference. In days well within the modern perspective, an educated woman was regarded as an unwomanly one; and a taste for blue in stockings (though in long-skirted days more readily concealed) ostracized the feminine precursor of the "high-brow" from the privileges of her sex. Books are no more formidable weapons for women than for men; and the pen which some men have found mightier than the sword may also by some women be found mightier than the broom. The ignorance of women in many lands must not be cited to indicate an aptitude or a taste for that form of bliss.

Similarly the fact that the group who hold that a college education unfits for the activities of life is composed of impenetrable *men*, may give that sentiment a masculine air without making it typical of the male.

The restrictions which a masculine rule have placed upon feminine expression and the extent to which such limitations have fettered or effectively discouraged the development of womanly capacities, can be judged only by the result of emancipation. For it is not merely the feet of women — as in China — but the minds of women that have been bound, by both processes limiting their excursions. The effect of restriction appears in social, political, and vocational fields and spreads over the entire career of women; historically it is doubtless the largest single influence that determines what women have done, even when the largest allowance is made for the extent to which their occupations express their nature. This applied field will presently be considered; for the moment we note that the intellectual qualities of women are of intensive interest because minds count in modern life and are going to count more and more. Without inclination to the educating process and capacity for it, the competence necessary for the civilized life cannot be attained. The world is going to be more and more interested in the feminine mind, as the tendency spreads to give minds (and feminine minds) a fairer and a larger field. The world will not thereby lose its interest in feminine personalities.

In brief: the intellectual test is valuable, but does not stand alone; deeper and more comprehensive are

the allied and supporting processes which give the cutting edge to the instrument, and determine the temper of the mind, the manner and spirit of its use. Women possess a distinctive type of mentality and express the mentality which they share with men with distinctive differences of manner and composition and effect; and all this, by reason of the different composite of their supporting qualities and their setting in the total feminine nature. To neglect these differences, and rely for one's convictions as to the nature of the feminine mind upon the detached mental tests, is unwarranted. It over-emphasizes the tendency to look upon intellectual sex-differences as the results of imposed restraints; its leads to the hasty conclusion of a comparable equality in all capacities from a demonstrated comparability in a limited and selected group of specialized proficiencies. The generic tests of life are more authentic than the selected tests of the laboratory; they alone supply a field of operation broad enough and natural enough to be adequate, however themselves artificial. Specific tests of isolated psychic capacities are valuable; but their true value appears only when they are appraised in relation to the total psychology in which they live and move. On the one hand, the results supplied by the artificial reaction of women under the attitude of a test are readily stated; their meaning is seriously in dispute. On the other hand, the evidence of what women can do is uncertainly reflected in the history of what women have done, because of generations of traditional restrictions of women's careers and expressions. For these reasons, though not for these alone, the measures of the powers

of women as recorded upon a masculine or a neutral yardstick leave the powers of women a problem, and the desirable status of woman a controversy.

VII

Once again a long bit of rough logical road has had to be traveled to gain the easier highway upon which one may proceed more smoothly the rest of the way. The concerns of life in which men hold the common stock and women the preferred, and those in which the reverse distribution holds, must be sought in those close, intimate, social, democratic relations that affect directly the modes of living that count in convictions as well as in occupations and satisfactions. This is the habitat of deep psychology, where traits are at once subtle and profound. Here the feminine mind, as all minds in their specialized aspects, becomes most revealing, most characteristic in the actual and complex encounter with the play of general cultural and special social forces, with life in all its complexity of tradition and circumstance, as it is warmly and richly lived. Under such complications, the relative simplicity of the "woman question" assumes the sophisticated intricacy of the "feminist movement." Here the psychological forces shaping the attitude toward women and of women meet the practical forces that shape the common situation, the common world, in which all sorts of people and all sorts of men and women must find a way of adjusting their differences of opinion and of nature in a psychological as well as a practical *modus vivendi.*

Feminism is itself a telltale manifestation of the

feminine mind. But the tale that it tells is not merely of the aggressive sex-consciousness with which men can afford to dispense or express without need of defense, but of the reasons why there is little occasion for a masculinism. The world has for many ages been a man-made world. It may be a crude affair, but there are some provisions in it for a masculine type of interest and happiness, some cozy corners of reckless abandon, some invitations to masculine zest. Here and there are a few sheltered tables labeled: "Reserved for women and children." One of the overlooked reasons why the woman's place is in the home is that man has decided that his place is outside of it — in the great man-made world without. In a more systematic survey there would be much to say, in the past tense and in the present, of the subjection of women, of the unsuitability of any established forms of social regulation, as of education, to the inherent psychology of the feminine mind. It is the undefined status of women and the inner attitude toward the accredited sphere of womanly expression, rather than the approved or tolerated treatment of women, that tells the tale. So far as respect and privilege go, we of the New World — in which we have retained a sense of its making — readily accept the judgment of a people and its institutions by the position accorded to women. Indeed, our visitors from beyond the sea comment upon our attitudes sometimes with intelligent amazement, and sometimes with unintelligent despair.[1]

[1] It remained for a scholar of the Teutonic persuasion to recognize in the "Cult of Womanhood" *the* supreme American danger. His explanation exposes the trap which knowledge sets for learned minds: the cult is traceable, he thinks, to the matriarchal system of the Amer-

Feminism is the expression of a growing consciousness of the unsuitability of traditional restrictions to modern conditions. Like many a movement it is subject to extreme expressions, and, more unfortunately, is apt to be judged by them. Its progress has been hampered and its motives distorted by a sort of radical iconoclasm which selects as the idol to be shattered the presumption of the male. Nothing is to be gained and much of great value is to be lost by fostering in any measure a sex-antagonism. Sex-differences may be interpreted by way of compensation for specialization; and the assumption or discussion of superiority is futile. No sex can show the other its place and keep its own. What the world is interested in are the distinctively masculine qualities and the distinctively feminine ones, and the values attaching to these in the perspective of ideas and ideals of the day.

Sex-differences, like all authentic differences, are valuable. Such differences prevent a Sahara-like standardization from sweeping over the world. Feminism and masculinism should be encouraged to their fullest and freest expression. A neuter mind is not desirable, if possible; and a denatured mind of either sex would, like some of the artificially grafted fruits, sacrifice flavor for something less choice. What the world owes to the feminine mind is a native and authentic emphasis among the common human traits, which is responsible for some of the deepest trends in civilization.

ican Indians, combined with the practice of co-education. By the same logic one may conclude that as women in cruder times were accustomed to accept dictation at the hands of men, they now naturally become stenographers; this conclusion, however, appeared in its proper place, not in a professedly learned volume, but in a frivolous column of jokes.

The compensations which it has made strong enough to offset the perils of a too aggressive masculinity have established sympathy, esteem, affection, charm, grace, and the amenities and gentilities that enrich the art of living. They compensate for the insistent utilities and the coarser brutalities of an unredeemed nature. By reason of the investiture of the dominant social control in the hands of men, the manner of incorporation of feminine qualities in the cultural products, and the value set upon them, becomes a test of the cultural level of attainment. In so far as civilization is domestication, the domestic inclination of women is an asset. Its scope is broad, but its focus lies in the intimate personal relations and constant social contacts of the daily round. In so far as civilization is transformation under exploration, invention, inquiry, and mastery, the constructive inclination of men is an asset. The bypaths of invitation associated with these divergent, though not exclusive traits lead to minor contrasts and remoter consequences. Social institutions and regulations, and the prizes and approvals which they establish, provide congenial avenues of expression for such traits, and likewise set up limitations and restrictions. Such cultural products are normally cherished and embraced, and only with an awakening consciousness of their limitations are they endured, then tolerated in rebellion, and finally displaced by more congenial forms. The attitudes shift imperceptibly under the slower processes of adjustment; they alter rapidly under the deliberate stimulation of a growing maladjustment. In such a setting, feminism has an intelligent origin, while the form that it assumes reflects

the temperamental reactions of racial and national as well as of individual temperaments.

To sense the spirit of such reactions and to gain an insight into their justification, one may observe selected areas of human interest. The occupational field contributes a suggestive illumination; and a glimpse backward to primitive conditions is interesting. "A man hunts, spears fish, fights, and sits about," said a primitive Australian, with the plain implication that the rest is woman's work. Apart from the sitting about — which is a perennial masculine proficiency — the work of men has decidedly changed, far more so than that of women. The larger reorganization has fallen to men, and in that lies some excuse for their failures and lapses. Viewed occupationally, there is in these and the nearer generations so little distinctively masculine work available — that is, for the vast majority of men — that men have been compelled to take the more interesting portions of women's work away from them; for the industries were originally predominantly feminine. Out of them men have made manufacture and commerce and trade and business, and have injected into these pursuits masculine orders of satisfaction. Without this masculinization of industry, the modern world could not have arisen. It is not to be inferred that all business activities are peculiarly masculine. What has happened in recent days is only that the business man has come to be regarded as the typical male, to whose interests and habits of mind all others must give way. In the confidence of his self-approval and the consciousness of his economic power, he may presume to regard a University as a

knowledge-plant, of which the significant side is the time-table and the cost per student-hour. For his tired (though not overstrained) mind, the drama in the hands of business-minded managers must be reduced to vapidity, horse-play, and the display of the feminine without suggestion of mind or eternity. The glamour of business hangs over every masculine activity, however questionable in service or practice, that is accredited to this absorbing pursuit. Most of it is admittedly necessary, though its necessity is unintelligently considered; yet much of it is by no warrant a manly calling. To select an unimportant instance: the stately personality that bears so unworthy a title as "floor-walker" or "hotel-clerk" fails to impress the reflective mind with the inherent virility of that calling. Appearances are deceptive; we must look below the surface to determine how far what men do and what women do is theirs by inherent fitness, or by tradition and convention. This consideration is pertinent because so many attitudes toward the feminist question are rendered superficial and irrelevant by lack of psychological discrimination.

In further illustration both of convictions and of human relations, one turns naturally and without apology to the business of politics. The reasons assigned privately and publicly why women should not vote, make a self-respecting psychologist hesitate to exercise that uncertain privilege. The hypothetical danger of entrusting the ballot to many women is the same as the demonstrated danger of entrusting it to quite as many men. We rejoice in the removal of the mediæval disability of women in regard to education,

having found them unexpectedly educable. True it is that most women and most men have an effective and a different resistance to the process; yet it remains to show any distinction in gender between one uneducated vote and another. What is really feared is not quite clear: Is it the effect of women on politics, or the effect of politics on women? Replying to the former: It is true that men have made politics a game and a fight. If we wish to keep it so, it is well to leave matters as they are. If we believe in municipal housekeeping, it might be well to recognize the housekeeping part of the community. And more seriously: If we believe that the interests that are entrusted by Nature to women may also, at least under masculine guidance, be entrusted by men to them; and if we believe that as the world is apparently arranged for occupation by both sexes, so may institutions recognize that fact, we shall at least be prepared to consider the question on its merits. Doubtless there is a hazard in any rapid and violent reconstruction; and what seems to be feared is a sudden introduction into social regulation of a soft sentimentalism and a one-sided emphasis. Even Mr. Ellis, who is generously fair to feminism, considers that "nice, pretty, virtuous little laws, complete in every detail, seem to appeal irresistibly to the feminine mind." But he promptly atones in a parenthesis, that is fairly incandescent in its illumination: "(And of course, many men have feminine minds.)"

If we accept the political test, we must recognize how far we have made politics a masculine privilege, and how far it is naturally so. Judged by appearances, the legislative function is sustained by cuspidoric liba-

tions; and if one were to argue that the salivary incapacity of the weaker sex unfits them for a place in the halls of state, it would be a grotesque but not an unfair caricature of many an argument oratorically uttered in those halls. The effect of politics on women is a graver matter. It resolves itself into a matter of proportion, and a matter of a fundamental faith in human nature and in the institutions and ideas established for its direction. The psychologist can afford to believe that in the career ordained by Nature, sex has been too long tried, is by this time too well-poised, to suffer any serious disarrangement by the exercise of a modest democratic function. Conviction is, indeed, tinged with faith, with confidence in the inherent rectitude of sex-endowment, in the authenticity of the feminine mind. The question also intrudes whether objectifying their social interests may not prove for women a desirable corrective for feminine failings and cloisterings; it may well be so. The feeling that one is exercising an obligation as well as a right is more congenial to a sense of responsibility than the uncertain enjoyment of privilege. Unquestionably women will bring to all their activities a feminine technique and a feminine attitude, which will prove disturbing to vested masculine ways, confident with "the confidence of their insensibilities." The justification of equal suffrage will depend upon the ability of women to dispossess themselves of their failings, in behalf of the public interest, as well as men can dispossess themselves of theirs. Upon this referendum the polls are open.

The political application is important in its own

right, and is furthermore pragmatic and direct. Votes bring a certain range of issues to decision, or place them for trial in partial and progressive fulfillment. They stimulate reflection and reveal the inconsistencies and bias of established institutions. This is their educational service; apart from this, politics by no means supply the significant avenue for the contributions of feminism, desirable and undesirable. The great highways of ideas that direct social attitudes, mental discipline, æsthetic taste, the sense for the human superiorities, are far more comprehensive, far more momentous. In this light the feminization of the absorbent minds of the young by a too large preponderance of women among school-teachers is a serious weakness of the school-system. The opinion seems to prevail that if only there are a sufficient number of unspecialized and axe-grinding committeemen on the school-board to introduce the masculine element of domination, it matters little who does the teaching. The feminization of literature, aided by the paradoxical situation that women have more time or inclination to read, the increasing differentiation of women's magazines and women's pages, is also a step in the wrong direction. The aggressive phases of a "woman's rights" movement are unwholesome. They agitate sex-antagonism. These protagonists resist any measure of segregation in education, ignoring the fact that the real segregation takes place spontaneously in the elections of men and women; they insist that women shall be exposed to the same mistakes as men, holding that so long as the two sit side by side in rigid consciousness of equal opportunity for instruction that is not quite suited to either, all is well.

And in the larger aspects of these questions informing us "Why Women Are So," or, "What Eight Million Women Want," there is the same tendency. It is aggravated by a feministic version of the past, presenting the history of the sexes as a continuous and malicious domineering of women by men. These rhetorical triumphs over men are misguided; they have given rise to a brand of feminists who hold that men and women are substantially alike, only that men are peculiar. They lead nowhere and lead away from a discriminating and helpful view of the theories and the conditions that confront us. They serve to prove the dislike of impartial analysis, which is one of the serious charges that the masculine ventures to advance against the feminine mind.

The essential desirable effort is to shape the social order to the needs and capacities of both sexes, and especially to encourage in that order those influences that promote the higher types of satisfaction in which both sexes have a parallel interest. For these are what make life most worth living, make the significant distinction, not between men and women, but between low-grade and high-grade men or women; and in that gradation, between the many shades and grades, the sorts and conditions, that bridge the contrast. To make the world safe for the higher values of life may appear too pretentious a formula; but something of this order, more modestly framed, is what is aimed at in the right disposition of the specialized qualities of men and women, and the equally right disposition of their common nature, common interests, common strivings, common capacities, common failings. All

this must be recognized in terms of the several institutions — occupational, educational, religious, and, in the highest sense, social — which are the recognized instruments of human progress. What is wanted is not a melting-pot of human quality in which laboriously developed products shall lose their distinctive form, but an alembic of such psychological potency that all the baser qualities shall be transmuted into gold. In such a consummation the elemental masculine and the elemental feminine will not disappear, but be developed to their choicest expression.

The supreme issue of feminism, and that which gives it a timeliness beyond all other phases of its interest, lies in its pacific contribution. Women, like all the morally responsible nations in the vanguard of civilization, are irrevocably bound to the settlement of controversies by peaceful measures. Women may be more affected by the unspeakable horrors of war; men may be more affected by its irrationality. Joining forces they reinforce the greatest campaign that the world has ever witnessed, — the war for the extermination of war. Here lies the largest masculine responsibility — the imperfect reorganization of the male to suit the conditions of modern thought, the unbalanced development of the male, strengthening ingenuity and the mighty forces of control of Nature, with imperfect control of the moral forces that alone can wisely direct them. Again citing Mr. Ellis: "We must realize that there can be no sure guide to fine living save that which comes from within, and is supported by the firmly cultivated sense of personal responsibility. Our prayer must still be the simple, old-

fashioned prayer of the Psalmist: 'Create in me a clean heart, O God!' — and to hell with your laws!" Women will forgive the masculine expletive for the sake of the feminine sentiment. The charge remains that men, called upon to spend their largest energies in subjugating Nature, have continued the habit of subjugation by subjugating women and other men, and not themselves. To-day the unrestrained cry of the male resounds clamorously if yet sensitively in the Nietzsches, stridently in the Treitschkes, diabolically in the Bernhardis, shamelessly in Teutonic representatives of press and pulpit and academy, with fanatic insanity in the ruthless sword-bearers of Germany, and ruinously to all the values of life and living in those who listen to their sacrileges of humanity, defended with a perversity that by comparison makes Mephistopheles a scrupulous saint. If there was from the beginning of time an ordained hour when the cry of the male should listen humbly and devoutly to the cry of the female, that hour has now rung. "Nature," says Mr. Ellis in a happy summary, "has done her best to make women healthy and glad, and has on the whole been content to let men run somewhat wild." Manlike, men have taken advantage of their privileges and abused them. The more innocent abuses may be tolerantly accepted; the menace of the larger ones has never before been realized. In the councils of peace that shall sit in high conclave, determining in Olympian parliament the fate of humanity, there will, in all likelihood, be no woman delegate. But invisible, yet responsible, a counsellor will be present in the spirit of the feminine mind.

XI

MILITARISM AND PACIFISM

THE controversy of militarism *versus* pacifism is large in extent, far-reaching in root and branch. It commands the tensest thought of the day and the anxious vista of to-morrow. It is here to be reviewed in argument and circumstance as it affects the alert modern mind. What affects that mind may have a variable logical value and a shifting psychological pertinence; standards of judgment must be correspondingly elastic. Arguments derive their momentum, their "convincing" energy, from the spirit and genius of the attitudes of their champions. The concrete points of view of militarists and pacifists determine the course of the controversy. The appeal of ideas becomes more significant than the push and pull of events; as "always the thought is prior to the fact." The controversy is Janus-faced, looking backward to wars and their provocations, forward to measures that will make war remote. Precedents count heavily when they accumulate rapidly and pertinently. This cannot be the case for the wars of great nations and the rapid modernization of ideas and conditions to which alike the nations and the wars are responsive. For foresight as well as insight "fifty years of Europe" is immeasurably "better than a cycle of Cathay." The psychological perspective must be maintained; to its composition the contemporary, the national, the personal allegiances contribute.

It is the taking thought, in times of war, of the origins of war and peace that becomes the proper study of mankind. In the presence of the world-war, projects of hand or mind unrelated to war-aims seem remote. Yet the student of conviction owes a logical as well as a personal loyalty; must recognize the one without relinquishing the other. The overwhelming movements of war decentralize reason; they disturb the legitimate influence of principles upon attitudes and practice; they move policies away from theories and toward conditions. Yet the obligation to inquire into causes and to set the mental household in order is strengthened in serious moments. A right view of militarism is as important as a right view of this war; the principles underlying peace are as important as any concrete peace-terms.

By such consideration war and peace cease to be incidents or issues however momentous, and become still more momentous as general conditions of the existence and welfare of peoples. The values at stake become the essential and eternal values of life and the enhancement of living, that we call civilization. Of such values, material, intellectual, æsthetic, social, political, and moral, the moral ones assume the central place; the right protection of human rights becomes the paramount issue. That historically the rights of men to life, liberty, and the pursuit of happiness have been strengthened by the issues of war is as clear as that they have been assailed by such organized national force. That the inclination so to defend them is an integral part of human nature is as clear as that the same impulses may be summoned to ignore and

override them. If justice lies predominantly with one warring faction or nation, it as clearly does not lie with the other; and there have been as many unjust as just wars. War as a means to determine justice or to enforce it must be measured against other means to the same end. But the complication of social forces, though always referable to human motives, modifies without impugning such clear-cut issues. For issues must become part of the conscious struggle; and the dramatic and compelling crises of war may be the most direct, if not under the circumstances the only way of incorporating them into the social consciousness. Such incorporation carries with it not only the tense emotional and romantically sentimental values attaching to great heroic enterprises, but also the heightened sacrificial attitudes and warm cohesive sense of patriotism, which in other contacts and interests may be as authentic, but fail to attain the same pitch, to enlist the same popular appeal, to arouse the same socialized sense of a cause embraced and won. The irrationality of war may be demonstrable and yet leave substantially intact the persistent thrill of its triumphs, moods, and employments.

But all this makes war enthusiasm intelligible rather than the military policy justifiable. To discover and analyze the psychological attractions of war is one matter; to sit in judgment upon the logical defenses of war is quite another. Both procedures affect the course of controversy; together they constitute the rationalized psychology of militarism and pacifism. How far the complex and variable adherence to either cause is psychologically, and how far logically deter-

mined, is a nice question for the individual examiner of his own convictions as well as for the critic of typical positions. Pacifism and militarism are alike played upon by abundant sentiment. A passionate devotion to peace is as mighty a motive for spiritual endeavor as the comparable and more conspicuously heroic devotion to war. Much as we value the rich thrills of intense living, those of us responsive to the logical responsibilities of conduct feel the strong undercurrent of reason, the driving force of a consistent world-policy that must be enthroned as the arbiter of human destiny. We cannot await the die of fate, but must project a course and do our bit in exercising a rational control — a control of impulses, of interests, of affairs. We thus feel the obligation to review the pacific forces and the militaristic ones in our common nature, in the institutions that we support, in the ordering of the mind's allegiances. It is this obligation intensified by the spectacle of the embattled nations, in which none are spectators but all combatants, that determines the controversy which is here to be presented as a psychological conflict of forces. The tragic moments of the impressive and frightful drama recede; but in their place the momentous consequences of right thinking appear no less tremendous in the far-flung measures of national and humanitarian policy.

I

In the perspective of the day the conflict between militarism and pacifism occupies the commanding position. The world-war makes it the supreme controversy of our generation. Yet the champions of the

opposed positions are not inclined to show their colors unmistakably. The hesitation has a one-sided source. In profession all or nearly all are pacifists; nobody wants war, few defend it unreservedly as an institution; many regard it as inherent in human nature, and the preparation for it a prudent national insurance against disaster; there is a further fear that its removal as a contingency would weaken the social structure and tradition, and relax the virile energies of men. The pacifists who come in overwhelming numbers to enlist in the cause of peace show a divergence of principle and measures that divides them as sharply as those who hesitate to join their ranks. The articles of faith to which the two parties respectively subscribe are at times much the same, and as often quite incompatible. A liberal pacifist may be a close and not uncongenial neighbor to a mild militarist. The extreme militarist regards the extreme pacifist as an obstinate and misguided enemy to the nation and the nation's cause; and the unlovely estimate of the tendency of the opposed view is cordially reciprocated. There would appear to be a radical divergence and a sharp controversy. Yet when summoned to debate the two parties are commonly bent upon conciliation, upon a middle road of moderation and compromise leading to a common goal. Specific positions as held by specific persons would in one interpretation be assigned to the militarist and in another to the pacifist camp. So involved a situation requires illumination; the removal of misunderstanding is the first step.

A certain measure of clarification is readily attained; positively by definition, negatively by avoiding a nar-

row and unfair usage of the two terms. In no sense is the controversy a verbal one; with a decent regard for logic and a fair treatment of honest opinions, the essential features remain distinct. Ignorance and prejudice are chief among the gross sponsors of misunderstanding. To use either term as a sneer or an accusation or an execration is not an argument, but at best a disguised billingsgate. The temptation to express an opinion by the simple use of a classification, with the word "damn" as a convenient adjective, may be a relief to one's feelings, but it is not an aid to thought. The emotion that inspires the condemnation may make it more or less venial; the existence of the temptation is a sign of weakness, not of strength. Such extreme defection from logical standards may be ignored in the present survey.

Next in order of unpardonable sin is the assimilation of either position, as ordinarily championed, with an extreme or absolute adherence, — thus making the uncompromising partisan in either camp the typical supporter of the doctrine. The type of the ultimate extreme, the unbalanced, monomaniac extreme, is the fanatic. There are undoubtedly fanatical militarists, and fanatical pacifists; neither group contributes to the sanity or the comfort or the progress of the world, though the one order of fanatic may be more innocent, and present more redeeming qualities than the other. The absolute, uncompromising types of partisans in this world-wide controversy that engages as does no other the vast and deep resources of our emotional nature, must be recognized, so far as they remain well within a liberal interpretation of sanity. But the over-

whelming majority of militarists are not absolute militarists; and the overwhelming majority of pacifists are not absolute pacifists. To imply in any degree, without ample evidence and justification, that an avowed militarist is an absolute militarist is an insult and an injury, — an accusation logically unsound and morally unfair; to associate pacifism with the extreme position of the small minority of absolute pacifists is worse, because the implication is more uncalled for and more apt to lead to further and more seriously unfair implications.

Pacifism presents the more pertinent instance of the fallacy and the injustice of making the extreme the measure of the mean, in that it is the actual, almost (within recent days) the common practice. For this reason a digressive step in exposition is necessary. The tendency to pose the ordinary orthodox pacifist as an absolute pacifist is presumably more a matter of stupidity than of malice; it could not proceed far without an element of both.

If we were not at war, the factors of the controversy between militarism and pacifism would easily appear in their right relations. War disturbs the judicial attitude in two ways: it interprets arguments narrowly for their bearing upon immediate issues, and these in turn for their strengthening (or weakening) of a policy already embraced, and embraced with all the concentrated determination of loyalty and interest and the defense of cherished values that are threatened. It thus, secondly, sets the arguments in a seething mass of tense emotions; it plays upon them a stream of sentiment carefully fostered by the social ideals. As indi-

viduals, we are naturally and rightly approved if we respond to this mass influence; we are naturally and rightly regarded with suspicion if we remain indifferent or hostile to it. In such tremendously potent issues, the emotions remain central; in the one direction they reach for the support of reason; in the other they extend to the confirmation of action. War makes it of vital consequence that we should act, and act with promptness, enthusiasm, and determination. Arguments, above all logical refinements, seem irrelevant. War is a trial of faith by deeds. War imposes restrictions of speech and influence; it curtails desirable liberties at every point. A state of war indicates that the accredited system of national and international control has temporarily broken down; its guarantees are threatened, in part impaired. Under the danger to the commonwealth the rights and privileges which are ordinarily secure must likewise yield. Everything is affected by reason of the solidarity of political and economic and broadly social and particularly moral and individual rights to life, liberty, and the pursuit of happiness. There cannot be and there should not be business as usual, or pleasure as usual, or occupation as usual, or insistence upon privilege as usual. The entire social system, especially in a democratic country, is conceived and adjusted for peace; it is inevitably violently disarranged in times of war. There is no reason to ask for exemption from this concession on the part of convictions and the accustomed manner of their expression and advocacy. But like all restrictions and concessions, the test of their value lies in the wisdom of their exercise. These considerations suggest the

unique place of convictions in war-time. Convictions, true or false, worthy or unworthy, make war possible, and under stress actual. Convictions maintain the combatants in action, sustain their morale, support sacrifice, and keep loyalty alive. Convictions that fall in with war aims are approved; those that oppose or lessen the belief in the cause are disapproved; if serious and permitted to influence action or attitude against the national interest, they constitute treason.

Yet if the stern actuality of war were permitted to obliterate or override all other values, life would soon be reduced to chaos, and civilization would disappear. Nothing is clearer than that in war-time the system of values which in one respect we call justice or fair play, in another honor, in another morality, in yet another religion, is carried along with the banner under which the citizen-soldier is enlisted. Without the influence of these values upon the spirit of war, upon the cause of war, upon the conduct of war, and upon the discussion of war, there would be no distinction between a just and an unjust war, between a righteous and a diabolical war. War may and must modify the applications of justice, honor, morality, religion, and is liable to distort them; but it cannot ignore them. Speaking as Americans, convinced that the forces of liberty, justice, and right shall ever determine action, we insist upon their recognition, and are fighting for them. We are convinced that they must prevail. That conviction is an integral part of the moral capital of our war. We do not unreservedly and without consideration set loyalty to a legally declared war above all other obligations; that is not done by responsible governments

attaching value to convictions reached in the spirit of liberty, or to the cherished interests of civilization. For this reason we can conscientiously aid the German people to rebel against the violations of the laws of nations and morality which the German Government directs and defends. In so doing we are asking them to desert one type of national loyalty, not in disloyalty, but in the spirit of a truer loyalty, no less national but respectful of other loyalties. For the German, as for the German sympathizer, it is a tragic choice between treason to country and treason to law and morality; but the choice must be made. The redemption of the proper choice lies in the elevation of the loyalty to a finer quality and a sturdier conviction. These considerations must remain in the background of judgment, if the issues between militarism and pacifism are to be rightly judged.

But war is not only a national uprising for a great purpose; it is a particular manner of uprising. Its methods are determined, ruthlessly determined. There arises the deadliest kind of antagonism, that of means and end; there may be in some minds the stanchest belief in the end, and the strongest opposition to the means. Under the stress of war, positions in regard to the merits of pacifism and militarism are shaken; the issues become complicated and confused. Such an internal antagonism may occur in other controversies, but when it occurs has by no means the same practical bearing. Before 1914 the most militant operations reported in the daily press were those of a group of women claiming equal suffrage. On other occasions advocates of the rights of labor have resorted to mili-

taristic methods. Many believers in the rights of women and in the rights of labor approved the cause and disapproved the means. Their positions commanded respect; for ends and means in these conflicts might be separately considered. With the declaration of war there is no choice of means; it is itself a decision that the ends cannot be otherwise secured, though, obviously and importantly, it does not follow that in war military methods alone should be exclusively relied upon, and all others abandoned. The evidence that other means have been patiently and conscientiously attempted, serves to justify the declaration of war. Public opinion and political policy continue to operate despite the break in diplomatic relations and the industrial blockade. Points of view permeate even in the trenches and prepare the minds of men for the negotiations of the future.

By virtue of these circumstances, the controversy between pacifism and militarism is bound to be profoundly altered by a state of war. This result may not be logical; it is merely psychological and inevitable. To an absolutely detached intelligence, it might appear merely and solely as a disclosure of human frailty. Every practical mind acknowledges it, though without succumbing to it wholly. The attempt to analyze the merits of the controversy between militarism and pacifism is even a more binding obligation in times of war than in times of peace. The obligation imposed is that of rising as far as we can above the two temptations — the one that of too immediate and narrow an application of principles, the other that of too complete a surrender to an emotional impulse. By such resistance

we show a loyalty to reason — a loyalty with which no cause can so ill afford to dispense as that of a just war. Reason assures us that we may acknowledge our instincts without worshiping them. It is as futile as it would be pointless to consider the issues of militarism and pacifism in any other bearing than upon the present world-war, which has diverted not only the resources but the thoughts of men as has no other event of history. It would be equally irrelevant to approach the discussion from any other point of view than that of the unquestioned righteousness of the Allied cause, from the point of view of the convinced faith in the moral values which the Allies support, and which the German position denounces in principle and violates in action when speciously protesting an adherence. It would be well in our considerations to dispense with the hot emotional indignation against the monstrous crimes for which a German militaristic policy is responsible, though we have no intention to dispense with this invaluable moral capitalization of our energies in the actual task before us. For in controversial issues there is a hierarchy of value, and an inner shrine where desecration is too serious to be contemplated with calm abstraction. There are values which cannot be questioned, without ceding the conditions indispensable to right thinking and right living. Here there can be no compromise, no abatement. To a detached intelligence such an attitude may appear as prejudice, or it may appear as faith; to the practical intelligence that is here addressed, it is the acknowledgment of the position from which alone a profitable taking thought is possible.

Thus limited and thus inspired, the survey of the contentions of militarism and pacifism for a share of the regulation of our thinking that shall determine in times of war as in times of peace our ways of life, our attitudes, our perspective of values, our employments of mind and hand, may contribute to the understanding of the genesis of our convictions and their psychological sanction.

II

Resuming the direct exposition, we face the peculiar, indeed the paradoxical situation that the actuality of the war has distorted the interpretation of the pacifist position to a caricature that would be grotesque were it not so tragic in its consequences. The resulting inversion may be stated as that of prejudging action by profession, or even — far less legitimately — by the name of a profession. When an avowed pacifist enlists in the army, the unreflecting comment holds that he is inconsistent or has abandoned his pacifism. The more logical conclusion is that under proper circumstances a pacifist may become a soldier as consistently as any one else. The more completely logical conclusion is that the adherence to principles which make him a pacifist and the decision to enlist are derived from separate though not unrelated reservoirs of his stores of conviction. The distinction involved, though seemingly refined, is actually simple and is of the order commonly made by the average mind. Even more, the average mind is decidedly prone to reason by the pragmatic method of "from action to principle" and not the reverse. That "actions speak louder than words"

is the common rule, but is in this case strangely reversed; that is the paradox. The actions are ignored, hushed, or misinterpreted, because of the banner under which they proceed; the bystanders look at the banner, and not at the procession.

Such paradox is, however, itself not uncommon. It is one of the phases of conviction that must constantly be considered; for it is nothing more or less than a variety of prejudice. It is not the simplest variety of prejudice, such as results from either plain dislike or a hasty conviction that runs ahead of the evidence or disregards it. Its genesis is somewhat more complex. In its simplest and crudest form, the argument may be outlined thus: A pacifist believes in peace; the nation is at war; consequently, a pacifist is opposed to the national position. And in further consequence (assuming a still duller wit, a greater ineptitude for the process of argument), the pacifist, if consistent and unresisted, would obstruct the government, and weaken the national cause through his obstinate adherence to the principles of peace. If it be objected that in an essay dealing with pacifism and militarism as a proper controversial issue addressed to an intelligent reader, such elementary and palpable fallacies have no place, the only reply is a frank apology. Unquestionably, except under the mental distortions of war, no reasonable being would be tempted to argue in this childish fashion. But the effect of war, as of any great sweeping emotion, is to lower decidedly the critical level of reasoning; and we may as well meet the fact in this connection as elsewhere.

It is an interesting reflection that this twentieth-cen-

tury war may be the first that has had to face in any real strength the position of pacifism as an essential part of the mental and moral equipment of thinking men. It is more than likely that former wars were generally accepted and supported with little conscious resistance; we know that some wars were welcomed. Opposition was confined to the justification of this or that quarrel as a proper basis for war. The growth of the resistance to war as war is of course the direct work of pacifism. Every citizen, whatever his share in the conflict of today or whatever the reflections that led to his decision to enter into the conflict, has been decidedly affected by the principles of pacifism. He was and is under the influence of pacifistic hesitations, reservations, overcoming of resistances, that are strong or weak according to his nature, his reflections, his outlook upon the values of life. These vary in status from the very strong to the very weak; every one is more or less of a pacifist in the sense of feeling the resistances to war that moral, economic, and other considerations have established. Just how strong such resistances must be to make it proper for one to call himself a pacifist is an idle question, certainly not a significant one. The pacifist justifies these resistances, rationalizes them, and upon them rears a political philosophy that shall incorporate them.

To gain a sense of how principle and practice may react upon one another we may consider the analogous conviction that might make one a vegetarian outright, or leave an aversion to coarse fleshy cuts and joints, or a constant if moderate repugnance actually overcome when meat is eaten. But vegetarianism is substantially only a practical matter — a practice following from a

certain philosophy of food. It is free from large bearings upon the constitution and spirit of the social order. We can practice vegetarianism individually, but not so militarism; and pacifism equally has its importance in its collective social bearing. When such is the case, the essence of the position lies in its scope, with an elastic, complex, and at times uncertain application to the principles and their practice. In vegetarianism not alone do actions speak louder than words, but there is substantially only action; though one may be led to adopt the practice for somewhat varied reasons. The arguments of a "health" vegetarian are different from those of a "moral scruple" vegetarian; their relations remain cordial. Thus identity of practice may follow from diversity of principle, and close similarity of principle lead to moderate diversity of practice with comparable consistency.

To return to the argument: the difficulty is not only to put it plausibly, but to be assured that it is put naturally, as it actually lies in the minds of those influenced by it. Doubtless the practical phase, as in all popular arguments, is prominent in consciousness. Now the "action" side of pacifism in ordinary times of peace hardly appears, or at best negatively as a refraining influence, possibly on obscure occasions in turning the other cheek to the smiter. In war-time, however, the action appears in the position, however sporadic, of the conscientious objector or the active obstructionist. The popular mind seizes upon this as the pacifist position in action, and by the usual fallacy identifies pacifism as the principle which inevitably or at least consistently leads to such practical action. The fact that the op-

position to the war may be due (*is* notoriously so in far, far more numerous cases) to economic, political, or other reasons, is for the most part ignored or obscured. Pacifism is brought into the group of movements antagonistic to war propaganda and even receives the brunt of the opprobrium. To pause for an analogy: In the Boer War there was in England a very considerable opposition to the war, but the pro-Boers were not seriously accused of disloyalty. Their defection from the cause did not endanger the national position; and there was no temptation to call them pacifists. The absurdity of the conclusion would have been apparent. The absurd becomes plausible by reason of the changed conditions, predominantly because of the huge emotional factor and the vital menace that obtain in this world campaign. It may be a compliment to the strength of pacifism that it should be singled out as the center of attack; but the compliment is as undeserved as it is unwelcome.

The fallacy or the confusion is of course a limited one. Nobody argues that because some of the opposition to this war is, or is believed to be due to pacifism, therefore all of it is. Fallacies are not of this blank, staring, obvious quality. The pro-German feeling is clearly unrelated to the pacifist feeling; a sufficiently strong pro-German sympathizer might have welcomed America's entry into the war on the German side, while regarding it as unjustifiable on the Allied side. A still larger mass of feeling and opinion results from the conviction that the true policy for America was that of neutrality; it points to the two and a half years of the actual maintenance of this policy as a defense of its claims. So capricious is popular phraseology that this

phase of conviction, unquestionably the largest of the group that fails to support the national position or does so reluctantly or with reservations, has received no name. In addition, there is a group whose opposition to the war is based upon the method of its declaration, the fact that it was not done by the express vote of the people. If then we enumerate (1) the pro-German objection to *this* war, (2) the neutralist objection to *this* war, (3) the social-democratic objection to *this* war, (4) the pacifist objection to *this* war, we may not be accurate in the designations, but they make it plain that a fair or large similarity of conclusion may have its origin in very different philosophies. But the important, the overlooked, the critical point is that while the position of the first three orders of objectors is not only clear but undeniably applies to them as a class, that is far from being true for the fourth group with which alone we are concerned.

Since the pacifist objection is to *war as war*, the question whether the objection extends to *this* war and how far it does so is altogether undetermined. Only an actual census of opinion can decide. To any one conversant with the American situation, it is unmistakable that the proportion of pacifists who carry their protest against war as war to opposition to this war is very small indeed. The proportion depends, as we saw, upon the denominator: that is, upon the answer to the questions, Who are pacifists? How strong must be one's belief in the validity of the pacifist arguments to be so denominated? One estimate may be as good as another. In a liberal sense it may be that of the ten or fifteen or twenty million persons in the United States

who have thought enough of the matter to have an opinion, ninety per cent are pacifists.[1] If the meaning of the term is limited to a more outspoken adherence, a less reserved allegiance, a lesser hesitation to carry the pacifist principles far along toward the influence of conduct, the percentage would fall decidedly, but may still be regarded as a majority. If one has in mind only the members of pacifist societies and persons unenrolled of like opinion, the percentage would of course be much lower. Clearly the argument has slight bearing until we reach the last class, the thoroughly convinced, enthusiastic pacifists. From all the evidence available the percentage of these who oppose America's entry into this war is very, very small indeed. It may be as high as one in ten, it may be as low as one in a hundred. The odium that has been aroused against

[1] This conclusion may perhaps be more acceptably put, if stated in the converse terms. By just as good logic as that by which the pacifist is condemned, it follows that one who is not a pacifist is a militarist; and it follows with like logic (or the lack of it) that a militarist is one who believes in and approves the position which the German militarists have taken, and which is responsible for the present upheaval with all its terrible crimes and consequences. To say that there are not ten in a hundred of Americans who would enroll themselves in this group, in any sense, is certainly not an exaggeration. Very well then; if not in this group, they are in the other. and thus are pacifists. The reasoning in the abstract is sound; the fact that it is not adjusted to the situation is precisely the same objection that obtains in regard to the pacifists. Indeed, in a rough adjustment, there is no tenable objection to the statement that ninety per cent at least of Americans are far more pacifists than they are militarists, and that independently of whether they find it more to their liking to call themselves militarists than pacifists; or whether — and this is perhaps nearer to the actual situation — they object more to being called pacifists than to being called militarists. They feel more confident that their positions will not be misunderstood if they are called militarists than if they are called pacifists. But their actual position is the same whatever the name that they accept or refuse to accept.

pacifism is *not* based upon the practical positions *actually taken* by its adherents. It has no bearing whatever on the positions of ninety per cent of the avowed, militant pacifists, carrying the banner of their cause in war-time as in times of peace. If the meaning of the term be extended to include milder pacifist sympathizers, it has no bearing upon ninety-nine per cent so denominated. For the step from an opposition to war as war to an opposition to this war or any particular war is, of course and obviously, an extremely variable conclusion, and subject to just that uncertainty and complexity of circumstance which constitutes the interest and the difficulty of all controversies.[1] The para-

[1] Whatever the facts as to the proportion of war-pacifists among the total body of pacifists, this argument certainly deals leniently with the logic of those who regard pacifism and opposition to this war as synonymous. Pacifists — this regrettably common judgment seems to hold — *must* oppose every war, *must* oppose America's entry into the war, *must* be opposed to conscription, and presumably are looking for safe ways to oppose their government and give aid and comfort to the enemy, despite the fact that this enemy is above all *their* enemy — an enemy which is the most violently militaristic, the most anti-pacifistic force that has ever been established. Surely if any one thus holding ever stopped to think, he would see as plainly as daylight that the consistent, the convinced pacifist must be far more determinedly, far more violently opposed to the position of a militaristic Germany than any one can be who has thought less deeply, cared less warmly for the values of peace. But the obstinate anti-pacifist is so convinced of his opposition to the pacifist, that he is sure that whatever he himself stands for must be the opposite of what the pacifist stands for. He is so impatiently sure of his conclusion that he does not care to inquire whether pacifists hold the positions he ascribes to them or not. This common judgment not only prejudges the facts, but declines to consider the relation between principles and their application. Emulating the modernity of wireless communication the anti-pacifist takes a logic-less flight from prejudiced premises to prejudiced conclusion. There is no ready way to bring this judgment within the scope of logic. It may come about gradually by observing the many persons of respected judgment who hold a very different view of pacifism.

dox remains: the vast army of patriotic pacifists is ignored; the insignificant exceptions are alone considered. Such are the tragic possibilities of a strong prejudice and a weak sense of logic.

III

With the removal of this gross and unfortunate misconception of the spirit and the practice of pacifism, the controversy may be restored to the clearer vision that would obtain were we not at war, were our minds less troubled, less overpowered by the ominous situation revealing clearly and drastically, that unless we defend by the force of arms the cause of reason and sanity and law and order and right and morality, the values of life are notably menaced. The writing on the wall is so incandescent that we sometimes forget that the warning is pointedly directed to war itself, that the instrument of our fight and the enemy that we are fighting are one and the same.

> "We needs must combat might with might,
> Or might would rule alone."

The philosophy of militarism has its advocates. They should be attentively if protestingly heard. Their fatherland is Germany. Professor Woodbridge Riley thus presents their position. The movement begins with an ambitious triumvirate. Hegel, "the pope of speculation," hails in Germany the synthesis of the *thought* of Greece and the *action* of Rome. His philosopher's stone is the absolute, the one uniting principle that reconciles opposites and harmonizes contradictions. Hegel's grandiose generalizations, his lordly sweeping aside of troublesome, inferior realities,

his metaphysical autocracy, left their toxic impress on German thought, inclined it to the self-delusion that finds a Freudian satisfaction in vaunting phrases to smother ugly or unwelcome shortcomings or remonstrances. The doctrine and the mood become articulate in Nietzsche, himself an embodiment of irreconcilable contradictions — an invalid body and a mind of heroic intentions. Serving in the ambulance corps in the Franco-Prussian War, at the close of a busy day with the wounded, he heard a sudden thunder and saw the dash of a cavalry regiment in full charge. "Then," he writes to his sister, "I felt for the first time that the strongest and highest Will to Life does not find expression in the miserable struggle for existence, but in a Will to War, a Will to Power, a Will to Overcome." Thus, "the soul has skill to pluck out of battle, sweet and glorious truths." Nietzsche's is not so much a philosophy of militarism as a militaristic philosophy. With power glorified and might supreme, war is life at its fullest, its truest expression; and he who embodies the martial qualities is on the way to becoming a superman. The forces of so-called civilization tending away from this ideal — which also reflects the actual rise of man through combat from primitive club-rule to the modern embattled nations — are to be despised. The morality of Christians is a morality of slaves; and democracy is the refuge of weaklings. In worth the individual superman outweighs, as he scorns, the claims of the masses. He suffers no obstacles to his Will to Power; he stands, not lawless, but above the law, beyond the realm where obtains for lesser mortals the distinction of good and evil.

While the Nietzschean conceptions are developed for the most part in a lofty, remote, intellectual strain, at times with an æsthetic absorption in the imaginative creation, they approach the confines of application temptingly. They are readily used in justification of positions sustained by cruder, coarser motives, prompted by harsh, relentless instincts. The pragmatic intent of Nietzsche's philosophy may be uncertain; its actual influence is not. Its finer abstract features, modeled, it may be, for an ideal composition, were interpreted as the portrait lines of the figure of Germania. Possibly not as a prime motive, but no less with constant sympathy, and occasional direct application to the case of Germany, Nietzsche gave the aid and comfort of a definite programme and a dramatic venture to the ambitious war-lords of his country. Like himself, his countrymen were susceptible to high-reaching formulæ, accepting them as a philosophic confirmation of political desires. He became the prophetic force in German militarism — the pen in the service of the might of the sword.

The policy of militarism received its historical sanction in the person of Treitschke. Germany is boldly acclaimed as the superman among nations, and the State exalted to an Hegelian synthesis absorbing and overriding the individual wills. *Deutschland* must prevail *über alles* within and without; its superiority imposes a God-derived duty, makes it a God-chosen nation, bound by no laws but those of its own success. Actions which in others would be crimes are expiated and moralized when committed by the chosen instrument of human destiny. "War is both justifiable and moral . . .

the ideal of perpetual peace is not only impossible but immoral as well." "War is a drastic medicine for mankind diseased." The State is built for war and the military power is the only force to be recognized. Stone-deaf from childhood, Treitschke is absolutely unresponsive to any claims of pity or justice. He becomes the apostle of what we now recognize grimly as ruthlessness and unscrupulousness. The moral defect, paralleling the physical one, sets his mind negatively to ignore consideration of means, which are ever to the exclusively political-minded justified by the end. The voice is still the strident Nietzschean voice, but the hands are the coarse hands of Treitschke.

The only possible super-climax to this relentless philosophic structure would be the direct military application of its principles. Of this the spokesman is Bernhardi. He translates the philosophy into the terms of military practice. Might is the supreme right; treachery and strategy are one; war is biologically noble and necessary; brutality is negligible; peace is unworthy; treaties are scraps of paper; small nations are parasitic; Germany is the heroic savior of mankind; other peoples are contemptible and will remain so until Teutonized; such is *Kultur*. Bernhardi's world is an absolutely militarized world; in it there are no values but those established and cherished for military ends.

There would be little purpose in adding examples of the complete sway of this set of doctrines over the minds of eminent professors, statesmen, publicists, men of letters and of science, men of the cloth and of the bench, since Germany by an act of war converted principles into practice. The world at large stands

aghast at the issue, is stupefied by the collective epidemic of mind and morals. The convincing depositions are those made without the excuse of loyalty to a cause espoused; the responsible utterances are those deliberately leading the German mind to its undoing, and the German people to the abyss of national disaster. If such be militarism in action, argument is sacrilege; the twentieth-century will have none of it.[1]

IV

It would be a logic cabined, cribbed, confined, that would conclude that such is the inevitable issue of the

[1] This detailed consideration of Prussian militarism may seem disproportionate, for the reason that such a militarism is not a general but a specific position. If all the other great nations of the world announced an adherence to *their* supremacy above the rest of mankind, *their* contempt of other nations, *their* superiority to all laws of morality and a covenanted international code, and consequently proceeded to enforce these imperial pretensions by the force of arms, the entire industries of the world would be absorbed in military preparations, and civilization would cease. The irrationality of a Prussian type of militarism would seem to exclude it from a rational controversy. But here again, pragmatic considerations enter. Prussian militarism may be considered as the extreme of a position which in restrained application plays an actual part in continuing the military policies of nations, and in shaping the convictions of those who support such measures. At the same time it proves for all time that militarism unrestrained, militarism as a philosophy of the State, is doomed as definitely as the Germany that has provoked its destruction. A demonstration on so monstrous a scale excludes any counter-argument. Had Germany refrained from such suicidal demonstration, it would have been far more difficult to convince men that such a possibility was inherent in the principles of a relentlessly consistent militarism, if once it secured a hold upon a national imagination, and had prepared the way for its realization by the studied destruction of the forces that make for sanity, justice, and liberty. It is for these reasons that an account of Prussian militarism as a philosophic construction plays its part in shaping present-day convictions, even though these convictions are concerned with measures conceived in a wholly different temper.

principle of militarism — a logic parallel to that identifying pacifism with a supine non-resistance. The actual claim of militarism in a complicated world is far more tempered. The appeal is to history, to political constitution and economic rivalry, to moral quality, to a frank facing of reality and a prudent security. The historical claim is uncontested. "History is a bath of blood." The early and in part persistent motives of war are direct. Conquest is the nobler term, piracy the franker one; slaves and wealth in more primitive days, empire and colonies in later ones, are the spoils of the victor. Ambition among the rival victors makes war a challenge; in the verdict lies the national fate, as well as the progressive struggle of humanity through the dominance of the superior race. The military technique, the military ideal, the military profession, enlists the ability and the valor of strong men; the venture of war makes the unity of the nation. The modern mind raises the question of the cost, and reads the answer also in the course of historical evolution which spreads equally over peace and war and takes its set from the conquests of mind. Modern invention, born of the arts of peace, has so vastly increased the deadliness of war as to multiply beyond the grasp of the imagination the cost of war. Before 1914 the militarist argument maintaining that the result was worth the price, also that some nationally vital kinds of social values and human qualities cannot be otherwise secured, had a plausible sanction; now the past and the future belong to different worlds. Before 1914 wars were confined to local issues; now an issue big enough to precipitate a war seems destined to take on the

proportions of a world-war. The increased cost of war in lives, money, suffering, and ruin of so much of what men hold dear, as presented in the ledger of the world-upheaval of 1914, makes a radical revision of judgment inevitable, and sets conviction definitely in the pacifist's favor. The historical argument, by sheer overweight of the parallel forces of evolution, has worn itself out.

The traditional political and economic grounds of militarism are less and less likely to determine the convictions of men in future considerations. They illuminate the past and constitute the difficulty of the adjustment of tradition and the *status quo* to the beliefs of the present. They are offset by the growing forces of internationalism which are set strongly in the opposite direction, and are certain to revise the machinery of political and economic policies. The political-economic grounds as sources of friction may still incline men to believe in war as the inevitable, certainly the constant menace, while wholly convinced that war is neither desirable nor serviceable in the very solutions in which it is enlisted. Statesmen convinced of the paramount influence of economic factors in shaping political policy are laboring to minimize the tendency to use armed force, even though they continue to think in terms of armaments. The view that prevails, prevails in all camps with increasing majorities, is against the fatalistic conception of the function of war in modern political and economic adjustments. The recognition is clear and well-nigh universal that war as an enterprise, equally with war as an ordeal, or war as the inevitable court of last resort, is essentially subject to the same

motives and evolutionary conditions that have civilized all other social-political relations. As the institution of war becomes more and more incongruous to the spirit of that evolutionary process, and as warfare by its deadliness destroys so large a range of organized interests, the national policies, reflecting the convictions of men, will refuse to support it, eventually refuse to consider it. Yet equally must we recognize that the masses of men and a considerable share of the leaders of men will continue to think of the causes of war and the possibility of war in traditional terms, and regard as Utopian the efforts of those who are as strongly convinced as they are determined that these efforts shall succeed. What needs to be emphasized is that conviction without determination lacks courage; that what makes the project Utopian is thinking it so. And if it be so, the pacifist adds, the alternative is between Utopia and Hell.

Let it be remembered that even though war is a real contingency, there never is war, but only this or that war, with this or that aggressor and this or that defender, and a specific *casus belli*. The particular war arises because the friction that represents its "cause" is pushed by ambition, or hope of prompt and large advantage, or the domination of a military policy, or the growing impatience with a tangled situation, to a declaration of war. Under a differently directed set of motives the war could as easily, far more easily, have been averted, and some other form of settlement reached. The friction, however strong, depends for its ripening into war-motive upon the support of a militaristic trend, itself based upon the ambition or the

philosophy or the psychology of a people and its mode of rule. The futility of war as a solution of the difficulties which are supposed to "cause" it, has been abundantly demonstrated by Mr. Norman Angell. Even when liberal allowance is made for the considerable exaggeration of the inability of the issues of war, which are not all "spoils," to accomplish their avowed purpose — of which Mr. Angell is guilty — and with like allowance for the stretching of the militaristic argument beyond its legitimate implication (which renders it easy to demolish — a common fault in the pacifist arguments), enough remains to warrant the title of Mr. Angell's book: "The Great Illusion."

As the problems which an actual war is supposed to settle become greater, involving the greater interests of the greater nations, the illusion and the menace become greater. With equal truth, William James tells us that "war becomes absurd and impossible from its own monstrosity," and Mr. Angell, that it becomes so from its own futility. The twentieth-century conviction so strongly favors a non-militaristic form of settling national disputes that the political-economic defense of the war-function is reduced in bearing, is removed in pertinence for future policy to a point at which the student of conviction may leave it to its natural and inevitable decline. Historically it remains an argument in the service of militarism so long as men's minds are engrossed by precedents with a feeble grasp of the vulnerability of precedents under altered situations, particularly under altered conceptions of human aims. A more critical historical sense, a keener interpretation of the economic-political organization of the modern

State, retires it to a diminishing as well as an illusory importance.

More pragmatic considerations in defense of war are those urged by the moderate and responsible militarists, who, in addition to massing the fatalistic, the economic, the political, the disciplinary, and the moral arguments, place a well-considered philosophy of force at the base of their structure. Of this position Captain Mahan is a fair exponent. The initial consideration is that the affairs of men, the national affairs particularly, cannot be managed without the use of force, and of force nationally organized. This the new type of constructive pacifist concedes and takes his place — though possibly not unreservedly — with Captain Mahan. The more orthodox non-resistant, older type of pacifist rejects the view, and relies upon the perfection of international law and the removal of war as a national provision to bring about the social order that will secure peace, and exclude force in the military sense. The militarist concedes that force is best exercised through law when laws are adequate, yet holds that the appeal to force as a possible resort strengthens the law, vitalizes diplomacy, supports the progressive measures of civilization. The position which William James, as a pacifist, takes from the moral side: "Let the general possibility of war be left open, in Heaven's name, for the imagination to dally with. Let the soldier dream of killing, as the old maids dream of marrying," — the militarist supports as a political stabilizer. The removal of war as a possibility, he argues, would weaken the political structure and leave it open to serious impairment from many sides; it

would withdraw the backbone from the political framework. At the same time it would depreciate the strong, virile qualities indispensable to a worthy race; it would undermine the sense of nationality; it would profoundly alter the sovereignty of the State. These arguments are real and serious in that they raise the question whether under present conditions the abolition of war might not be open to loss and danger, not alone the danger of too radical a reconstruction, but of less prompt and just settlements of international disputes than have resulted in the past from war, and particularly from the bloodless conflicts in which the threat of war proved decisive. The reply concedes the point so far as urging provisions for bringing to bear the same intercession of force exercised in a modified temper, free from the complications of national jealousies. Pacifism accepts the obligation to preserve the efficient machinery of international relations; it accepts the obligation to transform international regulation as a whole, not crudely to operate by simple removal of an overgrowth.

The militaristic argument naturally and properly addresses itself to the proposed substitutes for war, particularly to arbitration. It has no difficulty in indicating the fallibility and limitations of the judicial procedure. The militarist must not assume that arbitration proposes to dispense with diplomacy; he must fairly face the question whether diplomacy under a pacifistic predisposition (which favors open public discussion) will not prove to be as serviceable as diplomacy under the assumptions of a militaristic eventuality (which is favorable to secret agreement). The antithesis of arbitration and armament, or of law and

war, is false as well as partial. A constructive pacifism is not so limited in resources; arbitration is far more significant as an elastic principle than as a set device. It is essential that constructions of such momentous bearings be considered as totals of consistent architectural plan, with the details framed in sympathy with the underlying conception. To inject details or apply criticisms derived from a foreign source is to violate the logic of the scheme. The militaristic conception of the protection of the social order relies upon the balance of power as its constructive device; the pacifistic conception is set toward an international control, a league of nations. Yet a strong case could be urged for a "balance of power" construction to include the essential protective demands of the pacifist statesman, while retaining the values on which the militarist sets store; and the powers of the "league of nations" could be so determined as to remove the chief (though not all) objections which the militarist urges against the project. All of which shows that when principles approach application in a proposed project, — as yet untried, — a certain measure of concession is possible. The coherence and promise of the scheme depends so largely upon the spirit of its administration — and that spirit is now so strongly imbued with pacifist trends — that the future is indefinitely more secure from the menace of war on either basis than was the past. The liberal militarist will insist, not upon organization for war, but only upon the benefits and protection that such organization secures, upon retaining the strong national unity, the essential sovereignty, of each nation; the pacifist will make every concession

that does not weaken the solidarity of the forces that, once made institutionally strong, will of themselves make war so anomalous in principle, so hopeless in practice, that it will make little difference whether it is abrogated by decree or not. For both militarist and pacifist (always excepting the relentless Prussianized protagonists) are agreed that unjust and needless wars — war-upheavals under imperial plots against weaker nations — shall be made impossible at whatever cost.

So much of application seems necessary to give the issue of militarism and pacifism the realistic setting that the present crisis and the considerations of its ultimate settlement demand. As a rule the sources of conviction, which is the matter in hand, are not notably illuminated by a discussion of the adjustments which the opponents might agree upon in a spirit of compromise in court or out of it. But when, as in this controversy, the actualities of war or peace so overshadow the formulæ of militarism and pacifism, this compelling circumstance may well be enlisted to vitalize the logical and psychological discussion. For indirectly, if not directly, the turning-point in the practical decisions of thoughtful men will center about their mental responses to arguments. The forces now at work are making pacifists or militarists as never before. Even in the thick of war men realize that militarism determines war more than war establishes militarism; and that a permanent peace is dependent upon an enduring pacifism. Yet here also there is a temperamental as well as a logical contrast. In the light of the world-war the militarist will conclude that despite our advanced culture, no nation is safe without adequate military

preparedness; the pacifist will conclude that other and more adequate guarantees must be provided, and thus further reduce and make it safe to reduce the significance of armaments and the military spirit. Logic and psychology seem destined to maintain their rival claims until the psychology of human nature has more deeply absorbed the logical impulses, or until nations agree by effective provisions that the interests which they regard as supreme shall no longer be at the mercy of unrestrained ambition or the precarious balance of threat and protection.

V

The moral benefits of war play a large part in the militaristic arguments. In them war represents the disciplined life, the strong life, the sacrificial life, the stern, sharp decision and the bold venture of fate and fortune. War brings forward the deep, ancient trends that have supported the race in its great enterprises. It makes a direct appeal to sentiment and romance; it consolidates the interests, arouses the national sense, quickens the loyalties of men. It moulds the consciousness and shapes the traditions of a people. The qualities that it enlists are the more keenly needed as their occasion recedes from the ordinary employments, especially from the dull industrialism of the latter-day world. Hence the need for a "moral substitute for war" which James urged prophetically upon a complacent age. In so urging he concedes, though a pacifist, that war is "human nature at its highest dynamic." "Its horrors are a cheap price to pay for rescue from the only alternative supposed, of a world of clerks

and teachers, of co-education and zo-ophily, of 'consumers' leagues' and 'associated charities,' of industrialism unlimited and feminism unabashed. No scorn no hardness, no valor any more! Fie upon such a cattle-yard of a planet!" One further concession must be made: that these moral benefits of consecration to a cause belong not to the army alone, but to the people at large, who share in the sacrifice, the loyalty, the common possession and the massive emotional stirring.

The other side of the shield bears a message equally significant. The moral losses of war make as formidable a footing. The cruelty, the brutality, the excesses of war make it a life as strong in vice and temptation as in the possibilities of heroism. "Single men in barracks don't grow into plaster saints." Over-drilled discipline may weaken initiative, and make men unfit for other service; authority may brutalize; military-mindedness may lead to scorn of qualities indispensable to manhood. War is not made up of supreme moments; it enforces much from which the moral sense recoils or suffers permanent injury. Were it not for the resistances made strong in the moralization of peace, which the citizen-soldiery offers to these temptations, their effect would be far more disastrous. Tough-mindedness has its evils no less than tender-mindedness its compensations.

On the social side of collective benefits, we do not abandon the hope that causes otherwise defended may come to enlist the same devotion, the same consecration; and even though they lack notably in their appeal, they entail no loss, suffer no impairment of the very qualities which are offered in defense of war. Yet

the arguments thus too formally marshaled are detached from their source, and the accounting is by that reason false. It must be borne in mind how much of the redemption of war is due to the issues of peace. The modern mind thinks at once of the Hague tribunals and the international agreements which have moulded the moral spirit of the martial life, by limiting the very violations inherent in the conflicts of war. Men's moral impulses and restraints move as a whole, as a part of the evolutionary push that receives its impetus dominantly from the moral gains of the peaceful life. The martial virtues and the military character reflect the moralized social order under which men's minds move to action in whatever cause. The soldier carries the qualities of the American, the Briton, the Frenchman with him; and these qualities of his tradition and training must be credited in fair measure not alone with the mitigations of warfare but with the valor and nobility of his conduct as a soldier. The sense of fair play and justice and chivalry and honor are fashioned in the daily intercourses of men, in the adjusted relations of peaceful callings. The moral revival, though realized in the hard experience of war, derives its strength from the spiritual resources made strong in the pursuits of peace.

The conclusion is reinforced from many sides. We observe once more that the reaction to the appeal of war takes its quality compositely from the character of those who respond. If we credit these to war, we must credit to it also the utter degradation of the German army in all ranks, even more responsibly in those who give than in those who carry out the fiendish commands.

The spectacle is no less revolting in the civil and diplomatic authorities than in the military ones. It is common to lay this moral bankruptcy to the militarization of the German mind in all its operations; to such moral depths can a people descend through a militarism unredeemed. Clearly the manner in which a people responds to the military conscription, the military transformation of the standards and employments of mind and hand, is a crucial test of its moral quality — raising to heroic stature virtues well wrought in the fiber of a free and healthy-minded citizenry, or debasing to servile shamelessness those vitiated by a "might is right" discipline, betrayed by a deliberate demoralizing policy conceived in the interests of defense of militarism.

These terrible lapses are not looked upon as the inevitable consequences of war; by no means. Properly moralized nations, when driven to war or electing war as the lesser evil, are as competent as they are determined to demonstrate that such is not the case. But as temptations and liabilities they may properly be reckoned in balance to the assets of war. Likewise in appraising the assets, the pacifist is justified in emphasizing how much of the intensive uplift finds its source in the moral rebellion against the injustice, the oppression, the cruel wrongs of the aggressor. It is not the bare fact of being at war that summons Americans to a patriotic enthusiasm (the Spanish war aroused a very different psychological response), but the inherent appeal of the cause for which they are fighting, — the indignation against the vicious tyranny that they are determined shall perish from the earth. For

such to be the case, one of the belligerents must have contributed as positively to the attack upon the cherished values of civilization as the others contribute to their defense. The moral accounting of war has a double entry. Clearly the inherent iniquity of war leaves so large a balance on that side, that its redemption by qualities of merit or its past service is hopeless. The moral benefits of war cannot save it, though they may well lead to the conviction that *they* shall be saved, so far as may be, in the service, the conscripted service, if need be, of peace. It is idle to maintain that we can assent to war in the interest of the heroic qualities or the national solidarity which it admittedly favors. The point is not — as one pacifist argues — that we should not consider setting houses on fire for the sake of the possible heroism of firemen, which is a false analogy; but that admitting the inherent (though limited and dangerous) moral redemption associated with war, we cannot admit that these offset in the moral field or beyond it the equally inherent losses and its common degradations. War remains iniquitous despite its redemption by fine qualities, its thrilling romance, its active quickening of the loyalties of men. For these values we must look elsewhere; their day is done in the older setting; the national structure of the future must provide for them otherwise or submit to their partial loss. National loyalty will survive, though reinterpreted in the international loyalty that finds its strongest claim in the removal of the menace of war.

The "pentecost of disaster" remains; the war moves to its fierce and uncertain conclusion. From it we may derive not "sweet and glorious" but bitter and chas-

tening truths. We witness and share in the unreserved sacrifice in effort, in money, in hardship, in blood and anguish. We accept the demonstration and resolve that these mighty powers shall be trained to the devotions of peace: that the hero-worship of the soldier shall remain enshrined, yet share that shrine with the heroes of humanity in the same cause of honor, justice, and liberty. The justification of war lies in the removal of wrongs which it accomplishes. Wars of liberation, whether from bondage of man to man, of protest to tyranny, of the emancipation of the spirit — and only these — take their place with the great achievements of great men and great peoples in the progress of civilization. The resolve is strengthened that these shall come to men not with less sacrifice or effort, but with less cruelty and crime. Surely there is enough injustice, enough needless suffering, enough mean ambition, enough brutal ignorance and crass bullying in all phases of the social stucture to enlist the fighting instincts and the martial enthusiasms of men. Truly valor will change the form of its expression but not its value or its service. Such transformation is precisely the force by which man has risen from his low estate and changed the face of the earth. He gains material control and social control by the exercise of comparable qualities differently applied. The control of his own nature is the goal set by pacifism.

VI

In the conduct of argument the pacifist has faced a difficult task. He has had to prepare the minds of men for a mode of looking at the evolution of the past and

the constitution of the present order, that runs counter to the usual habit. War as a possibility has been woven into the fabric of national coherence; its elimination threatened to leave not a gap, but a weakening of all the strands. If followed to its logical conclusion pacifism would require a reconstruction of the concept of nationality, would re-interpret the rights and privileges and the mode of intercourse of a nation among the nations. To make pacifism actual would imply a radical reformation of institutions as well as of conceptions, but by no means a revolution. The step would be but the confirmation and convergence of forces well under way. The earlier arguments were bent upon intensifying the sentiment against the cruelties, injustices, and irrationalities of war; next in order came the emphasis upon the futilities of war, the economic futility, the political futility, the biological futility: that most, if not all of the alleged profits of war were illusory; that it settled boundaries and racial questions unwisely and temporarily, often with increasing aggravation; that its burdens fell most heavily upon the fittest and eliminated them from survival. The later stages of the argument became constructive — a proposal of measures by which the problems inclining to a military solution could be otherwise and more fitly and enduringly solved. Throughout, the growing incongruity of war with the spirit of the modern social order, the growing impossibility of war by reason of its cost and the interdependence of nations, directed consideration to the constructive measures of pacifism.

In this evolution it was natural that the pacifist should for a time assume the negative rôle of the anti-

militarist. The justification is clear: that peace establishes its own defense. Peace is the acknowledged precondition for the welfare of art and science, of industry and the pursuit of happiness. Its interruption is a disaster; war is the institution that needs defense. If reason could decide, all that is needed is to show the monstrous folly of war and the futility and cruelty and human waste of war, and the argument for pacifism is won. So far we may agree that the burden of proof is rightly assigned: that it would be pointless to set forth the benefits of peace in a survey of pacifism. They will be granted in full measure in the assumptions of every discussion. If war is inevitable, peace is much more so. What the pacifist is called upon to set forth is the defense of peace against the militaristic attacks, and his own constructive policy for the future; likewise his interpretation of the past and of the social, political, and intellectual forces now operative.

The arguments confronting the pacifist are naturally the converse of those that he goes boldly to find in the enemy camp and seeks to put to rout; but when thus converted, they present a somewhat different front. The moral argument appears as the corruption inherent in an enduring peace freed from the stiffening discipline of war. "The certainty of peace" — not the actual state of peace — "would, before the expiration of half a century, engender a state of corruption and decadence more destructive of men than the worst wars." It appears also in the inability of the peace routine to summon the highest virtues upon a large scale. "In peace man belongs to himself. He knows no other law than his personal interest. He no longer has any

other occupation than to seek his own good. The greatest virtue is self-abnegation, the spirit of self-sacrifice, and it is in armies during war that that virtue is practiced. It is not only the individual whom war ennobles, but also the entire nation." "War regenerates corrupted peoples, it awakens dormant nations, it rouses self-forgetful, self-abandoned races from their mortal languor. In all times war has been an essential factor in civilization. It has exercised a happy influence upon customs, arts, and sciences." "Unless . . . war is the divinely appointed means by which the environment may be adjusted until ethically 'fittest' and 'best' become synonymous, the outlook for the human race is too pitiable for words." "Yet unless human nature shall have been radically modified in the course of evolution, unless it shall have attained a moral strength and stature unknown at present, it appears certain that the attainment of this much desired universal peace will be as the signal for the beginning of universal decay."[1]

Arguments of this order are as difficult to refute as to establish. In terms of evidence, incidents and precedents are far from comparable and may be selected as readily on one side as on the other: virile nations that are peaceful, and warring nations not notably virile, are as readily cited; for such instances are question-

[1] The first two citations are from German, the last two from English writers. In specific arguments the militarists of the two countries are often in close accord. But the setting of such citations in the German writers, even in the more responsible ones, shows a more uncompromising position than obtains among the English. Arguments of moral and national benefit are more incidental to the German presentation, in which the "might is right" doctrine dominates, while they are frequently central in English considerations.

able by reason of the uncertainty of terms and the classification under these terms of the complications of human qualities. Precedents and parallels are usually set with a backward reference and a one-sided emphasis; presumably they add little to conviction, but serve to reinforce prepossession. The fact is that historically war has always entered into the scheme of human affairs, as circumstances to be endured, cherished, or embraced. Men have always thought in terms of possible wars; they have expected them or dreaded them; plotted for them or boldly entered upon them. The charge that wars have been provoked to distract from internal dissensions and as a deliberate means of arousing enthusiasm for a cause is frequently made, and doubtless in some instances is true. To construct a warless history of mankind would be a speculative indulgence. If from all this one gathers that human nature, as well as man-made institutions, has had a gory nurse, and that human qualities have been tried and selected by the ordeals of battles, the conclusion is sound, but offers slight guidance for present-day conviction. The argument is too detached, too abstract, too unadjusted to conditions and the changing forces of human progress to carry any definiteness of application. In the nature of things there can be no convincing parallel history free from the incidents of war; and causes settled without war seem inconclusive evidence on the other side, since the nations exercising them have also shared in the war-tradition. What the modern mind emphasizes is that history can never repeat itself. Each apparent repetition is part of a newer cycle, on a different level of advance. Even a parallel

evolution of a race of men accomplishing a parallel civilization entirely without warfare in some pacific Utopia (which the militarist would despise), such as might occur upon the planet bearing so inappropriate a name as Mars, would be of no avail. The rejoinder would be ready that conditions and human nature must be very different among Martians than on this distressful planet of ours. Obviously we do not go far on this route.

If we turn to analogous phases in the actual historical evolution, we can obtain a more instructive parallel by observing the kinds of issues for which wars have been fought. Historians who write history in terms of the advances of the human mind, like Lecky and White, furnish the proper evidence and its interpretation. They point out that religious differences were at one time fertile causes of war; that differences of dogma were real enough to make men fight for them or wage war on heretics. That kind of war is now unthinkable among civilized peoples, though in this world-war it has still played a part under provocation in the fanatical Near-East. Wars for sheer piratical conquest by unprovoked invasion would not be tolerated; and the question as to what virtues might be furthered by such enterprises would not be permitted to arise. The only remaining motive for war is the patriotic one; and Lecky observes that the irrationality of the religious sentiment on the one hand and of the patriotic sentiment on the other, and their interaction, constitute the core of the moral history of mankind. If the sentiment of patriotism could be similarly rationalized, similarly liberalized, the attitude toward war for this cause would

approach the feeling that now obtains toward a religious war. The parallel is not complete, cannot be so, and leaves untouched the question of the ultimate defense of the soil and the home. Yet it is a true argument in that it sets forth how the gradual elimination of the accredited causes of war would render all other considerations of minor importance.

Similarly, if we take up one by one the pacifist version of the arguments for war, we should be arguing that war does not select the strong and best; rather it weeds them out by destruction and leaves the weaker members to be the progenitors of the coming generations. We should be arguing that wars for defense cannot occur without an aggressor; so that the aims of the pacifist to make aggression increasingly difficult and futile is the complete answer to that defense. We should be arguing that the natural combativeness of men under the prevailing order is less and less responsible for the outbreak of war, though it may be relied upon to summon recruits when by other measures war has been provoked. We should be arguing that armaments prevent wars only when the recourse to war as a threat is itself a menace. We should be arguing that the internal differences that arouse a people to desperate measures, or again the just uprising of a people in open and armed rebellion, are the very conditions which a proper social policy would prevent, once the energies of men were enlisted in a convinced pacific determination. We should be arguing that the alleged superiority of a nation inviting it to convert that excellence into a might must be abandoned for a live-and-let-live policy, indeed for the pro-

tection by the greater nations of the smaller ones, if the world is to go on at all; and that such policy is already incorporated into the platform of all civilized peoples. We should be arguing that if adequate protection is to remain adequate, each nation anxious for an increasing margin of safety and never completely certain of its allies in the uncertainty of what is a defensive and what an offensive war, can only command perfect security by making itself a little stronger than the other, in an impossible progression.[1] And we should be con-

[1] There is a phase of the "defense" argument for war that presents a paradox in the argument and an inconsistency in its adherents. It invites a like danger in its refutal. That for every defense there must be an aggression is clear. Novicow puts it thus: A man's first duty is not to defend his country; his first duty is not to attack the country of another. But this evades the issue, in that one cannot control the other man's country nor in private quarrels the other man; so that the question of preparing for such an event remains. Mr. Angell accuses his "wise" critics of committing themselves to some such statement as this: "The nations of Europe will shortly be engaged valiantly defending their homes against the armed hosts who resolutely refuse to attack them. This Armageddon will be particularly murderous and the battles particularly appalling because each army has for years been training itself to leave its neighbor alone. They will all defend themselves heroically to the last man against the attacks which nobody will consent to make." And again he replies to the charge of the militarist that "the peace of the world depends upon the armed forces of the nations" by interpreting this to mean that "if the nations had no armies, the wars between them would be appalling." As a satire upon the one-sidedness of some of the arguments for war, this is fair and to the point. But it does not reach the core of the actual situation or the actual policies and convictions. Until the entire question of attack and defense is placed upon a different footing of probability, the measure of defense is likely to be rated by the estimated probability of failure to persuade the potential aggressor to desist. That the same preparation is available for attack as for defense means that in playing one game, we are really playing two; and the difficulty in holding to the original intention may be a valid argument for providing for that intention in a less dangerous manner. It is true that one cannot so shoot as to miss the mark if it is a cow and hit it if it is a deer; but that does not prove that a

stantly pointing to parallels in which police force has replaced military force to the enduring benefit of all concerned. We should be pointing out that in all the parallel sources of human friction, involving the same pugnacious impulses, war has been gradually eliminated as a form of arbitrament, from duels and feuds, from local and partisan struggle; that when recourse is taken to the power of might (apart from the exercise of a personal police force of self-defense), we look upon it as a regrettable lapse from the established order, whether it occurs in lynchings or riots, in strikes or incipient revolutions. The elaborations of these refutals make up a considerable body of the literature of pacifism. They are accessible to all and have played an important part in its growing influence. Yet their

gun is useless. The pacifist must be careful not to commit in refutal the same order of plausible fallacy as the militarist succumbs to in defense. On the other hand, Mr. Angell is quite right in accusing the rather aggressive militarists who are always insisting that their primary aim is peace, of a glaring inconsistency when they throw the weight of their influence unreservedly in favor of military protection, and decline to consider with like seriousness other measures in the interest of the cause of peace.

Mr. Angell uses the analogy of religious wars to refute another common militarist misconception. One might argue that the Huguenots were glorious in that they brought out the noble qualities of martyrs, also their fighting qualities. To the alleged implication that the pacifist would not have advised them to fight, Mr. Angell replies: "Of course no one means that they should not have fought, but we all mean that they should not have been compelled to fight. It is a noble thing to see a man go to the stake for his faith, but it is a vile thing that he should be compelled to do so. The resistance to the Inquisition was magnificent; the fact of the Inquisition was an abomination." The argument that the Greeks displayed the qualities necessary to resist the Persians cannot overlook the fact that the Persians had the qualities inclining them to destroy the culture of Greece. Attack and defense are everywhere two-sided; which means that they must be considered together. Their treatment under a militaristic and under a pacifistic conception are separate constructions.

power to carry conviction, as indeed the willingness to expose one's mind to their appeal, remains subject to the temperamental inclination that disposes one congenially toward pacifism or keeps one immune to its doctrines.

Argument can do little more to produce conviction; the spreading of the campaign as a proselyting force must do the rest. If the impression already made is limited in proportion to its inherent strength, the cause must be found in the logic of long-established institutions, vested interests, and the mental inertia which they cherish, not in a spirit of worship of tradition, but of a conservative prudence. As the abolitionists, or the "equal suffragists," had a long career of unpopularity, an uphill campaign against thick prejudice to overcome, before their cause became serious, respected, and at length dominant; and as long before a decision was reached by conflict of arms or opinions or ballots, the causes were first and firmly established in the minds of men, and only later in their practical policies and decisions, so must pacifism pass through the same evolution. Events may hasten or they may retard the issue. The essential step in their hastening that argument can perform to strengthen the psychology of conviction, is to face the logic of reality and by plausible construction induce reflective minds to enter upon the venture.

VII

The culminating aspect of militarism and pacifism is reached when these principles and their establishment are considered with reference to the systems of

government with which they congenially assimilate. What is the nature of the institutional forces and what the underlying principle of political rule which readily incorporate and are moulded by the policies of militarism, and what is the nature of the forces favorable to pacifism? Answering in terms of tendencies, and neglecting unessential qualifications, militarism is consistently enlisted in the support and structure of absolutism; pacifism is the natural ally of democracy. Shall the will of the dynastic ruler or the will of the people prevail? The case of Germany is the extreme but the significant extreme instance. Admittedly Germany represents the militarized form of absolutism. In the Teutonic conception the State absorbs the individual, subordinates all personal to State interests. It makes for paternalism, wise and unwise, for petty officialdom and domineering bureaucracy, for pedantry and arrogance, no less than for military dominance and its counterpart — a servile docility. The central factor in the institution is the dynastic supremacy, which when exercised in the temper of a fanatical Kaiser, self-appointed as the vicar of Providence, overshadows the political as well as all other phases of the system. With this conception thus circumstanced, the imperial ambition and ruthless aggressiveness follow inevitably; and the army becomes the autocratic embodiment of the will of the State. The existence of such a system implies a complete subordination of the citizens, a suppression of liberty of thought and action in other temper, a thorough indoctrination of the people in the dynastic prerogative. That type of absolutism can be maintained only by a rigorous military rule.

It does not follow that militarism leads to absolutism, or absolutism to militarism unreservedly. The absolutist form of government freed from an ambitious imperialism might confine the military rule to internal regulations. Yet historically and actually such a supposition is improbable; the interdependence as well as the rivalry of the nations of the modern world makes it so. The absolutist system and the militaristic rule develop congenially and consistently. The decline of absolutism is the indispensable condition for the reduction of militarism. Upon this conclusion the humanely reflective nations of the world are agreed. Absolutism is the chief defender of the most dangerous form of militarism. Its danger is the more menacing for the reason that any one nation, if powerful and unrestricted in its preparations, can precipitate a war, while it requires the concert of all to maintain peace.

Beyond this sanctioned premise, conclusions are complex. Yet a further conclusion appears: that armies and the policy of their support form an international interest, and must eventually yield to an international regulation. Under the present order the existence of a large and efficient army is compatible with a moderate, a liberal, even a skeptical attitude toward militarism. A democratic government pacifically inclined, might welcome a relief from an excessive military burden; yet may find it necessary to maintain a powerful military establishment, for the very reason that it cannot be assured of the same temper in its neighbors and has no adequate means of controlling them. Moreover such a nation will have liberalized its military organization and have made it an expression of the same civilizing

principles which have brought about its political democracy and its protection of individual liberty. Such a nation will have developed a high regard for the military profession, and have assigned honorable place to the protective function of the State. The army as an instrument, along with others, of the freely determined will of the State is a vastly different matter from an army as tyrant and master. The essential attitude toward militarism cannot be inferred from the size of the national army or the measures for maintaining it, but from the spirit of its organization and its accredited place in the political structure. Militarism makes large armies; but large armies may be an uncertain evidence of a militaristic conviction. The distinction between a police force and an army is familiar. Independently of size, equipment or organization, the two may have a common purpose so long as they are protective and defensive. The very conception of a police force is the existence of a common, well-understood will. The accredited uses to which a police force will be put are likewise understood. In the case of an unusual uprising when the civilian police force is inadequate, the military force may be called upon without changing the nature of the proceeding. An army exists primarily to repel an invading foreign force; it is prepared to resist aggression from without. But just there lies the dangerous distinction between defense and offense; it is the uncertainty of the temper in which that distinction will be made that arouses the suspicion of the entire military system, as at present conceived. In such a country as Germany the very scale and thoroughness of the preparations argue against a merely defensive

intention. So aggressive is the very organization, so complete the hold upon the popular mind, that a vast army organized for action becomes restless under inactivity, and at length eagerly looks to the day — "*der Tag*" — when it can try its strength. That charge would not apply to all large armies; as ever, the temper of the organization decides.

But the temptation to use force when force is there to be used, together with the awful magnitude of its power, remain sources of temptation. In pioneer days when everybody carried a "gun," shooting was frequent; going unarmed may at times be inconvenient, but an unarmed community is safer than an armed community. The comparison cannot be applied without large qualifications, to national situations; but the principle holds. The conclusion is conceded that in many a situation the use of force is indispensable, but the limitation of its use even more so. A constructive pacifism not only agrees to this, but urges the necessity of a police force to restrain combative and lawless impulses, to provide for emergencies which no system is adequate to prevent. Pacifism in its practical temper, far from assuming a universal pacific disposition or the readiness of all nations to come under its sway, insists that this ugly quarrelsomeness and natural pugnacity shall be brought under adequate institutionalized authority; only thus can they be counteracted, if need be, nullified by force. Hence the demand for an international police-force to keep the peace between nations; such force shall act in the national sphere — different as it is — in the same interests as the law upholds in the quarrels of groups and individ-

uals. The pacifism of to-day is intensely practical-minded and is made increasingly so by the stress of the war and the issues awaiting immediate settlement. Its supreme purpose is to incorporate into that settlement some distinct and adequate pacific guarantee, framed not in the older temper of give and take — so prone to degenerate to shrewd barter and secret connivance — but in the spirit of an international conviction definitely opposed to settlement by war. That same practical-mindedness focuses its attack upon the *aggressive* menace of war (since the cry of "forced upon us" must as often be the hollow excuse of a hypocritical lie, as it is an approach to the truth), and consequently places the limitation of armaments as a measure of prime importance in its programme. In brief the day of the pacifist statesman is at hand; not the least significant mission of pacifism is the redemption of statesmanship.[1]

If, then, the world is so nearly agreed that the most ominous incitations to war shall be intercepted, the most serious aggravations reduced, the principles of democracy and the self-determination of peoples se-

[1] The discussion of pacifism in the sphere of practical politics is obviously the next stage, already heralded. It cannot be included here. Yet mention should be made of a punitive weapon to be used in the prevention of war, which pacifism supports: the economic boycott. The object is to make clear to any recalcitrant nation tending to an aggressive war, the economic failure that will result; it offers the alternative of swords or ploughshares. It takes advantage of the modern interdependence of nations, and offers an economic substitute for war as a part of the policy of a practical pacifism. It gives a new tone to *Weltpolitik* and will doubtless enter into the platform of a league of nations. For economic profit, while not the cause of war, is apt to be the stake for which war is played. Withdrawal of the stake seconds the withdrawal of armament.

cured, armaments limited, a league of nations or some equally strong guarantee devised, small countries protected and great ones freed from temptation or means to use their strength unjustly, the arguments for militarism and pacifism seem needless, and only retrospectively significant. For a more fortunate generation that may come to be the case; at present it is far from being so. It is precisely when principles are moving promisingly toward practice that a controversy attains its truest pertinence, and the examination of positions is most needed.

The unprincipled action of Germany in the first instance by making war, in the second instance by the German conduct of war, in the third instance by the German mode of defense of its war and its lawlessness, and in many more instances by the shocking demonstration not alone of the horrors of warfare thus sponsored, but still more convincingly of the complete subversion of every moral interest of civilization, — by such drastic logic has the chief protagonist of militarism made the case of pacifism versus militarism incandescently clear, brutally obvious. From this extreme assault the cause of militarism will never recover; the association of militarism with Prussianism will long reflect the stigma of the one back upon the other. By demonstrating the terrible consequences of militarism carried to its ruthless extreme, Germany has given the death-blow to the cause that she espoused. Without the unspeakable infamy of that desecration, the world might but slowly have realized, indeed, have flatly refused to consider that the principles of any system of government, even in the chaos of war, could have such

an issue. Any argument setting forth such a menace as a possibility seriously to be considered would have been dismissed as the ghastly dream of a febrile misanthrope. And yet when we recover, as best we may, from the staggering blow to our faith in a partially redeemed humanity, we become responsibly aware that the practical problem facing the thinkers of all nations cannot take its complexion from this, any more than from any other extreme position. We must learn once again, even as we resolve upon its extinction, to think of militarism in more temperate mood, in a fairer consideration of the place of force nationally and internationally organized, in an imperfectly adjusted politically-minded world. For by adjusting our convictions to the clear reality of fact we prove the practical worth of reason, — our loyalty to intelligence as the sane control of the highest interests of mankind.

Thus reflecting we become responsibly aware of the folly of trusting to any set of principles unadjusted to the situation to which they are to be applied; we become responsibly aware that we do not compromise an end by applying ourselves conscientiously to the construction of the safest means, nor forsake a goal by scrupulous attention to the wisest route. We become responsibly convinced that if pacifism is limited to a conviction that at all hazards war must instantly cease and our own swords be turned to ploughshares, whether the swords of the enemy be sheathed or sharpened, such narrowness of vision makes any approximation to peace indefinitely remote. We become responsibly content to move slowly and wisely, if assured that each step secures the direction of our progress. Yet we are still

more responsibly alert to the critical need of a critical hour, and are prepared to break with the past in a bold venture for the future. Indeed, the supreme need is for men of large vision, determined to establish a war-freed world. Pacifism calls for its heroes in no uncertain tones, calls for them in the thunder of war to enlist in the army of the embattled nations resolved to win the war that shall end war.

This battle-cry of a distressed world appeals with a special claim to the convinced pacifist; it demands a higher than national patriotism. Not forsaking the one, but infusing it with a quality of sympathy for all nationally patriotic endeavor, it proceeds upon the multiplied security of pledged allies to demand the sacrifice of the unlimited sovereignty of one's own nation for the cause of the unlimited sovereignty of humanity. The nations that lead in such a movement, heralding the day of the international-mindedness of all responsible peoples, will prove their devotion to the inspiration of pacifism. Darkened as that conviction may well be by the increasing menace that the victory may prove inconclusive, even that the forces of might by the very treachery and frightfulness that is their strength, may extend their power over a world unprepared to resist such a diabolical attack, that conviction may yet find hope in the settled determination which the world-war has scarred upon the agonized hearts of men. The responsible idea of democracy remains: to make the world safe for pacifism.

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